The taberna structures of Roman Britain

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The *Taberna* Structures of Roman Britain.

by

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Statement of copyright

To my parents

Peter and Teresa Mac Mahon,

family and friends,

and to the memory of my godfather

Lt. Col. Liam Mac Mahon

'When sorrows come, they come not single spies, but in battalions'.
(Hamlet, Act IV.)

Glaine ár gCroí
Neart ár nGéag
Agus beart de réir ár mBriathar

So dorn dona dhubhfuillibh

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Abstract

The aim of this thesis is to explain how the shops (*tabernae*) of Roman Britain related to society. The buildings of a more humble nature, including *tabernae,* have been frequently overlooked at the expense of the more ornate public buildings and villas. This thesis proposes to redress this imbalance, as it is believed that retailing and manufacture were one of the most crucial features of Roman society.

Varied sources have been used to aid this hypothetical reconstruction and these included the excavated archaeological remains, the extant remains from other parts of the empire and the ancient literary sources. Although these provided a wealth of information they are by themselves limited in what they can reveal about their society. Anthropological and geographical studies have proved an immensely useful tool to illuminate other aspects of society. These were approached with great circumspection and examined in relation to the archaeological evidence.

Using all this information the thesis attempts to describe and explain the major factors that helped to create the form and geographical pattern of retail establishments in Roman Britain. It is argued that the *tabernae* were more responsive to and give a more accurate picture of the social and economic climate of Roman Britain than any other building type. It appears that the Romano-British community was well catered for in life's necessities with a wide variety of merchandise supplied by *tabernae*.

The development of *tabernae* is difficult to summarise, as more than any other building type they were subject to a multitude of varied and individual circumstances, but it can be demonstrated that a thriving and competitive retailing community existed in the major settlements of Roman Britain.

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Introduction

The *Taberna* Structures of Roman Britain

This thesis concerns itself with the domiciles of those individuals that worked behind the counters and served the customers that came into the *tabernae* of Roman Britain. The following chapters will endeavour to establish the character of *tabernae* and offer a hypothesis as to how shops functioned based on the buildings themselves. It is not intended to get engaged with theories of the buying of raw materials and merchandise, shop-management, profit and loss, coin economy and the many details involved in conducting a retail business. This is not because these factors are considered unimportant but is the result of the constraints of length on this thesis. Essentially the thesis takes the production of retail space as its central focus and endeavours to describe and explain this phenomenon in its contemporary form. From this it is hoped that the manner in which *tabernae* reflect the social and economic environment of the province of Britain can be observed.

To the best of my knowledge there has not been any systematic study of *taberna* buildings in Roman Britain. When buildings of Roman communities are considered the concentration is usually on their public buildings or prestige dwellings. The *tabernae* and more humble private buildings of Roman Britain have largely been ignored until relatively recently. Although monumental buildings are valid indicators of the beginnings of rapid urbanisation in Britain it can be argued that the ordinary buildings of the *insulae* are more sensitive and responsive to the economic and social climate. Monumental structures account for a small part of the built up areas in towns so the commercial and residential dwelling must also have left an impression on any visitor to a settlement. Shops merit detailed study, not only in their own right, but also to determine how they related topographically to their more prestigious neighbours. It is hoped that such an integrated approach to the building patterns of Roman towns will provide a more genuine view of urban development than consideration of a single building type or class of structure by itself.

A study of building practices in major settlements of Roman Britain has shown that individuals continually invested capital in their own property at the expense of monumental architecture especially in the later Roman period. It was the private residences rather than public buildings that enjoyed the luxuries of mosaic floors, painted walls and even bath suites.[1] This highlights the importance of adopting a wider approach rather then a site-specific study. A comparative approach to the study of the nature, size and location of *tabernae* can give clues to many of the wider issues concerning social identity and function. Hence, the factors shaping the character and development of the urban network during the early Roman period should not focus upon single buildings. A wider approach is necessary and this is why the study of *tabernae* is significant. The results gained by such an analyses of *tabernae* is far from ideal but it is certainly more representative of the evolution of these settlements in Roman Britain than any one building type.

According to the geographer Dawson 'the retail sector of the economy has been an essential area of interest to human geography for many decades. Not only has it provided the stimulus to considerable empirical, technical and conceptual advances in geography, but it has also provided a major area of analysis where geographers have applied their specialist knowledge to solve real world problems'.[2]

The importance of this study is that in no other profession or sphere of human activity was there greater scope for initiative, for the expression and also the development of a person's own individuality, than in a *taberna*. The shopkeepers of Roman Britain dealt with customers of every type, class, ethnic background, in every mood, anticipating their wants, leading them along the lines of least resistance, studying their idiosyncrasies and eventually securing both their patronage and good will. Essentially retailing is a major component of any urban environment regardless of its time period and this is why this study has been undertaken. As a result this thesis will touch on some of the issues of the process of urbanization in the settlement of Roman Britain.

The study of *tabernae* in Roman Britain is unique and there is little previous work to build upon and use as a basis for this work. A holistic approach has had to be adopted and different types of sources have been used to aid this hypothetical reconstruction. These

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[1] Faulkner, N. (1996) p. 93; (1998) p. 379

[2] Dawson, J.A. (1980) p. 13

include the archaeological remains themselves, the extant remains from other parts of the empire and the ancient literary sources. A great deal has been written about individual excavations and some interesting analyses has been drawn from the sites themselves. This thesis attempts to synthesise the data from these reports together and to deduce some possible conclusions concerning *tabernae* in Roman Britain. When cautiously interpreted the archaeological evidence essentially provides confirmation of the range of crafts and industries being practised within the settlements, and extends our knowledge beyond the very limited documentary sources.

Archaeological data from other parts of the empire, especially from Pompeii, Herculaneum and Ostia, have been extensively utilised in this thesis. The Italian cities offer more standing structures than Britain, were evidence is largely confined to wall foundations and floors surfaces. The better preserved remains in Italy at least offer possible evidence that may be missing from Romano-British sites. Of course this is not to say that the core is the same as the periphery. A passing glance at the remains will illustrate this but that all available evidence should be utilised when applicable to build this thesis. To reduce this bias archaeological remains from other parts of the empire have also been used particularly from the provinces between Italy and Britain. It should always be remembered that Britain was part of an immense empire and this is reflected in its architecture.

The purpose of this thesis is not to explain the evidence from the literary texts, but to provide a social interpretation of the archaeological data. In many cases the literary and epigraphic data for Roman Britain is sparse especially when it is compared to other provinces. Although there is a great wealth of sources discussing everyday life in Italy this has been used sparingly and has only been employed to aid the reconstruction of retailing in Roman Britain rather then imposing one that may be unfamiliar. The literary sources should not be rejected out of hand as they offer as much valuable information as individual artefacts since they are also a product of that society. This is more an acknowledgement that the archaeological evidence can present missing contexts that are assumed by the written sources.

Of the literary sources Vitruvius has been extensively used during the discussion on *taberna* construction techniques. There are inherent problems with Vitruvius, not least that he makes no reference to *tabernae* in Britain. It is generally believed that Vitruvius wrote

his treatise on architecture during the reign of Augustus. This would place his writings over half a century before the foundation of the Roman settlement in Britain. Vitruvius was aware of techniques and practices outside Italy and was not writing with advice and suggestions to a single reader in Rome in mind but to a wider audience and future generations of the Latin speaking world.[3] Vitruvius devotes much of his work to discussing public buildings and temples. The dwellings of the lower classes had little interest for him. What passing remarks he makes on residential architecture in Rome are agreeable[4] and at variance to others works such as Cicero[5] and Livy[6] who talk of housing collapses and fires. It is quite possible that he was attempting to flatter his patron Augustus rather then making a genuine statement of his personal view of the residential blocks at Rome.[7] Despite this the class bias in his work is enormous.[8] Vitruvius was writing during the early days of the empire and his work has acquired a somewhat exaggerated importance that can be attributed to being the sole survivor of what must have been many writings on architecture.[9] However, he was writing a textbook and touches on most aspects of an architects training. It is impossible to know if his work was ever read in Britain but he does discuss what he thought were basic architectural principles. While extreme caution has been used when he is cited in this work his writings are an essential source for the wider understanding of the attitudes and methods of Roman building.

The ancient sources are limited in what they can tell of their society and this is why anthropological and geographical studies have been used to provide an alternative perspective. Of course there are fundamental dangers in using sources from societies that are separated in time, distance and culture but these have been approached with circumspection and only those that appear to fit the archaeological evidence have been used.

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[3] Vitruvius mentions architectural practices from Asia, Syria, Gallia & Hispania see I.iv.11; I.iv.12; I.v.1; I.vi.4; II.I.4; II.I.5; II.vi.5; II.viii.9; II.viii.10.

[4] II.viii.17

[5] ad. Att. XIV.9.1

[6] XXIV.47.15; XXVI.27.1-3; XXX.26.5; XXXIV.44.7-8; XXXV.9.3-4

[7] Scobie, A. (1986) p. 406

[8] Yavetz, Z. (1958) pp. 502-3; Meiggs, R. (1982) pp. 29-30

[9] Richmond, I.A. (1965) p. 129

Anthropological studies may be useful in developing possible models for a people that were not only voiceless in Roman Britain but also as a class in the ancient literature. As the writings on retailers and artisans of Roman Britain are limited anthropological studies can suggest ways of interpreting that society. To these ends a general examination of developing countries can prove useful in forwarding ideas on the development of building practices in Roman Britain. It has to be acknowledged that there is the risk of making simple and crude analogies from the present to the past but any interpretation of the past can only be done from the present. Archaeological data is used to propose possible solutions to the cultural evolution of that society that can in turn be used to test any hypothesis based on anthropological studies.

Modern geographical studies have been used to support the development of suitable models to explain the evolution of *tabernae* in Roman Britain. Retail property during the Roman period, as in the modern age, constitutes an important component of a settlement's built environment and this explains the use of urban geography in this study. It is possible that geographical studies may illuminate the character and meaning of ancient towns. One of the first to explore the concept of ancient town planning was Haverfield in a paper in a town planning conference at the University of London in 1910.[10] The theories of geographical and town planning offer an account of the broad factors affecting retail growth and change and also provide information on the processes by which shops come into existence. Such discussions have been absent from urban studies in Roman Britain. The main hypothesis that has been used is that retailing is an evolutionary process, and that there are common discernible features of this retail development. If this is the case, then it may also have been in the past as a development process can be noted in the *tabernae* of Roman Britain. A further comprehensive knowledge of this can be gained by studying their variation against the more prevalent elements of the development process. It can be argued that theories ignore the many inconsistencies and complexities of reality. However, such theories if they are valid can be adjusted to take into account these varied intricacies. Despite these obvious problems the simple fact remains, which is common to both the ancient and modern retailer, that similar decisions have to be made for example shop location, type of goods produced and sold, whether to expand or close and other decisions.

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[10] Haverfield, F. (1913)

As mentioned above a great deal of excavated material is now available from Roman sites throughout Britain. A great wealth of information has been examined from around the province but this has had to be restricted to the larger towns of Roman Britain. Therefore this thesis should not be seen as a catalogue or gazetteer of the *tabernae* of Britain. Any such work would far exceed the limitations of this thesis. The smaller settlements and military sites have been largely ignored unless they have produced good examples of evidence observed elsewhere.

As this thesis emphasises the archaeological remains themselves, with the assistance of the literary sources, rather then *vice versa*, there are many social conventions known to have existed from the ancient sources that cannot be seen in the archaeological record. These include the concepts of patronage, slavery, clientage, *peculium*, dependency and bondage. By no means have these been ignored but it has been presumed throughout this thesis that the occupants of the *tabernae* were individuals making decisions that may be discernible in the archaeological record.

The thesis does not deal extensively with the specific items that were sold in each *taberna*. In general artefactual assemblages have been ignored, when found beyond a structure, largely due to their portable nature and the limits of interpretation this imposes. In contrast to the more portable artefacts, buildings and internal fittings are more likely to retain the context of their original use.[11] Essentially this study has concentrated on the actual *taberna* remains and any extrapolations made are largely based upon these rather then single artefacts.

The period of time undertaken has been largely confined to the first and second century with some overlap into the third in order to explore the development of the *taberna* without getting involved and distracted by the debate on the decline of Romano-British towns.

In order to carry out the objectives lined out at the start of this thesis it has been divided into ten chapters.

The first chapter is the background to the study of *tabernae* and defines the use of the term *taberna* in the Roman world. It then explores the origins of this form of architecture and how the individuals who lived and work within were regarded by society.

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[11] Sanders, D. (1990) p. 43

The final section summarises the published excavated material available from the major towns of Roman Britain.

The second chapter begins the core of the thesis and examines the structural remains of *tabernae* in Roman Britain. This analysis of construction techniques attempts to answer two questions as to how the *tabernae* were constructed and who built the *tabernae* of Roman Britain?

The factors that may have influenced and dictated the actual design of shops is then discussed in the third chapter.

Chapter four attempts to distinguish between *tabernae* involved in manufacture and those in trade. This examination of room usage explores the dual function of a *taberna* as a place of work and a residence and how these functions related to each other.

The fifth chapter uses the studies of retail geography to explain the location of *tabernae* within the townscape.

Chapter six uses information from the previous chapters to construct an economic model to explain the development of *tabernae* in Roman Britain.

The seventh chapter begins what can be termed the 'retail arena' and explores the evidence for and possible use of shop counters.

Chapter eight looks at doorways that are one of the most distinctive components of the retail arena. The study of doorways can offer possible suggestions as to how *tabernae* were viewed by the outside world.

An examination of the use and function of covered walkways in front of *tabernae* is explored in the ninth chapter.

The tenth chapter uses the evidence of the features of the retail arena as well as retail studies to demonstrate how *tabernae* may have functioned and how retailing took place in Britain and Roman society in general.

More than any other building type the *tabernae* were subject to a multitude of individual circumstances, but it is the intention of this thesis to demonstrate that a thriving and competitive retailing community existed in the settlements of Roman Britain. The aim is to enable a reconstruction of *tabernae* and to rely upon the factual evidence without becoming unduly hypothetical. It basically attempts to describe and explain the major factors that helped to create the geographical pattern of retail location in Romano-British

towns. Ultimately the goal of this study is to contribute to an understanding of how social and cultural factors influence the way retailers made decisions about the *tabernae* they lived and worked in. The focus is on the kinds of decisions that were made about the *tabernae*, especially decisions concerning size, layout, spatial complexity and the use of space, external elaboration and how merchandise was sold. While the following chapters must build upon limited evidence the thesis does attempt to utilise as much of the evidence as possible to build what is a credible reconstruction of the activities and aims of the retailers of Roman Britain. The field of enquiry is broad and definitive answers cannot be given. However, it is hoped that the tentative or generalised conclusions offered are well founded. Ultimately it is hoped this thesis aspires to raise further questions and further research in the area of ancient retailing in Roman Britain and beyond.

Chapter I

The background to *Tabernae*

The purpose of this chapter is to place the *tabernae* of Roman Britain into their correct social context. To do this in a meaningful and systematic fashion the meaning of the term *taberna* and its origin are discussed. After this the contemporary attitudes to shops are explored. As the literary sources in Roman Britain are so limited Italian material must be used. Although there are difficulties with this the literary sources at least hint at how people may have related to *tabernae* in their society. Finally the main excavations on shops in Britain that are used in this thesis are summarised. Once this has been discussed the following chapters will focus upon the material evidence for *tabernae* in Roman Britain.

i) The Origin of *Taberna* Buildings

A cursory examination of the word *taberna* seems to have had a great diversity of meaning as a wooden hut, a shed, booth, stall, bar, tavern, restaurant, shop, workshop, or an inn.[1] Scrutiny of the term would suggest that all these must originally have borne a considerable degree of similarity to one another.[2] It was presumably context, or local usage, that often determined the exact meaning of the word in everyday speech. In the literary and legal sources its definition is often clarified by the addition of an adjective such as, *taberna-argentaria, -cauponia, -deversoria, -libraria, -purpuraria, -sutriana* and -*vinaria*.[3] It is possible that the word *taberna* denoted the type of accommodation rather then the specific function to which it was applied. The *taberna* itself was both a dwelling and a place of employment.[4] In fact Axel Boëthius has termed this form of architecture as being 'shop-houses' or '*tabernae*-houses'.[5] In the context of this thesis the term *'taberna'* has been taken to mean a building or room where goods were made or prepared for sale and

[1] Oxford Latin Dictionary edited by Lewis, C.T. & Short, C. (1975)
[2] Frayn, J.M. (1993) p. 6
[3] For the term *taberna argentaria* see Dig. 18.1.21, Livy 26.11.7; *cauponia*, Dig. 33.7.13; *deversoria*, Cic. *Inv.* 2.4.14, Plaut. *Men.* 2.3.81; *libraria*, Cic. *Phil.* 2.9.21; *purpuraria*, Dig. 32.1.91; *sutriana*, Tac. *Ann.* 15.34 and *vinaria*, Varro. L.L.8.
[4] Varro Ling V.160; Hor. *Odes* 1. 4
[5] Boëthius, A. (1934) p. 164

sold. The term *taberna* as used does not draw a distinction between those premises that were involved in retailing alone and workshops. However, a distinction is drawn based upon the archaeological evidence in Chapter III.

The connection between a 'stall' and 'shop' is understood, in view of the resemblance of the simplest shop buildings and permanent booths in markets, to wooden stalls. The distinction between the *taberna* and stall would have been two-fold; in the shop there would be storage and perhaps living space above or behind the premises, and the shop would have been a more permanent enterprise than a stall. The reason why *taberna* was used without qualification, must be that it had become the most common form of address for shops or that adjectives formally applied to it or for other types of establishment gradually came to be used as substantives.[6] It is probable that the usual way to refer to a *taberna* in a town was by the name of the proprietor, or by the type of establishment. Examples of this of can be found in Martial (A.D. 40-103/4) who has made the booksellers Atrectus and Tryphon in Rome famous.[7] This individual treatment could only be used for the owner-occupier and one-person businesses. People who did not know the area would have found this type of classification impractical, and hence would have used a more descriptive term.[8]

The best evidence for the origin of *tabernae* is from Rome because the fullest and most vivid evidence survives for the capital city. The earliest reference to *tabernae* is attributed by Livy (*c.*59 B.C.-A.D. 15) to the reign of Tarquinius Priscus,[9] the fifth king of Rome (616-579 B.C.) when the *Forum Romanum* was first said to have taken shape with the construction of shops and houses around it. It would seem that they were built in rows of units of uniform size fronting onto porticoes that sheltered shoppers.[10] Initially they were of the commonest kind, butcher's stalls, cookshops, taverns and bakeries, but as the dignity of the place increased, ordinary traders disappeared and their shops were occupied by dealers in precious metals, gold and silver smiths and moneylenders that in turn were

[6] Hermansen, G. (1982) p. 126
[7] For Atrectus and Tryphon see *Epigr.* I.117.13. and XIII.3.4
[8] Frayn, J.M. (1993) p. 6
[9] Lucius Tarquinius Priscus 616-579 B.C. and Lucius Tarquinius Superbus 534-510 B.C. are conventionally the fifth and seventh kings of Rome but their reigns are so confused that there is no reliable differentiation between them.
[10] I.35.10 see also Dion Hal III.67.4; Richardson, L. (1992) p. 375

replaced by public buildings.[11] The complete conversion of the forum probably only took place during the reign of Augustus.[12]

The development of this style of domestic architecture at Pompeii can be dated in the *Thermae Stabianae* and in *Strada de Nola* area to the beginning of the fourth century B.C.,[13] and rows of independent shops in other parts of Italy, such as Ostia, to the third.[14]

Due to the nature of these old utilitarian, sometimes carelessly constructed, domestic buildings the evidence, both archaeological and literary is scant, despite the fact that *tabernae* must have covered great areas of ancient Rome and other cities and towns throughout the empire for all periods.[15] This is supported in Rome by the much later archaeological evidence for the topography of ancient Rome, the Severan *Forma Urbis Romae* dated to about A.D. 200, that displays rows of galleries and arcades lined with *tabernae*-like plans with open fronts along the main arteries, side streets and even alleyways.[16] The Marble Plan should be approached with caution as the surviving remains only represent a portion of the whole monument. Furthermore the geographical location of many of the pieces is indeterminable. As Packer points out the portions that have endured are serendipitous but there is no reason to believe that they are not representative of the whole.[17] These buildings reveal themselves as the relatives of those found along the many roads, streets and façades of the Imperial *insulae*. Archaeological evidence from provincial towns also records a high proportion of street frontages taken up by *tabernae*, so these proportions were probably not exceptional.

The *taberna* was the setting of a whole range of retail activities and was not simply shopkeeping, as we understand it. It was the centre of the life of the Italian city. Camillus, as he enters Tusculum in 382/381B.C., experiences the characteristic landscape of the city as the *taberna*.

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[11] Livy III.48.5, IX.40.16, XXVI.11, XXVI.27.2, XXXIX.44.7, XLIV.16.10; Cicero, De Or. 2.266; Varro, Ling. 6.59, op. Nonius 832L; Plaut. Curc. 472-472; Dio Cass LV.8

[12] Nichols, F.M. (1877) pp. 51-4, 58; Middleton, J.H. (1892) p. 233; Ramsay, W. (1894) pp. 18-9; Lanciani, R. (1897) p. 235; Richardson, L. (1992) pp. 159 & 375; Wallace-Hadrill, A. (1994) pp. 129-30; Steinby, E.M. (1995) pp. 325-42

[13] Carrington, R.C. (1936) p. 67

[14] Boëthius, A. (1960) pp. 137-8

[15] Boëthius, A. (1934) pp. 164-6

[16] McKay, A.G. (1975) pp. 77; Loane, H.J. (1979) p. 113; MacDonall, W.L. (1986) p. 122; Purcell, N. (1994) p. 661; Anderson, J.C. (1997) p. 327

[17] Packer, J.E. (1967) p. 81

> 'Inside the city he found the doors of the houses standing open and all kinds of things exposed for sale in the stalls; the workmen all busy at their respective tasks and the schools humming with the voices of the children learning to read; the streets filled with crowds, including women and children going in all directions about their business and wearing an expression free not only from fear but even from surprise'.[18]

Rome was a city of *tabernae* and its people were a nation of shopkeepers. Shops in the ancient world are generally thought of as a casual phenomenon, whereas they are a natural aspect of, and a key to understanding the economic and social structure of the city.[19]

Although no archaeological evidence survives presumably the original *tabernae* in the *Forum Romanum* were strip-buildings of the kind that are found in the later provinces. Livy mentions that Tarquinius divided the land surrounding the forum into individual plots that had *tabernae* and porticoes.[20] A fire in 210 B.C. destroyed many of the shops in the north-west of the forum but it did not spread to the houses behind.[21] Alternately *tabernae* could also have followed a tendency that can be clearly seen in the larger houses of Pompeii and Herculaneum, of having *tabernae* along street frontages at the expense of residential front quarters.

The exact date of the origin of the *taberna* is not known nor is it clear whether isolated *tabernae*, rows of shops or *tabernae* connected to a *domus* came into existence first, although the former is perhaps more likely given the evidence from the provinces. Despite this there is little doubt that some form of *taberna* existed along the streets of Rome before the laying out of the *Forum Romanum*. From that time onwards the *taberna* was the most ubiquitous and dominating urban architectural form in Rome and throughout the Roman world. The excavations of any urban settlement, in any province, frequently reveal the humble *taberna*.

While it may seem that this type of architecture was intrinsically Latin, Boëthius does not exclude the possibility of foreign influences that could have been Etruscan, Carthaginian or Hellenistic,[22] even if it seems clear that no foreign influences were needed

[18] Livy VI.25.9
[19] Purcell, N. (1994) pp. 659-60
[20] I.35.10; Dion. Hal. III.67.4
[21] XXVI.27.1-3
[22] Anderson, J.C. (1997) pp. 326-7

for the development the concept.[23] Purcell mentions that the origin of *tabernae* may lie in the construction of specially important buildings for valuable economic activities like the Athenian mint, which began to appear at the end of the fifth century B.C.[24] However, this seems not to be the case if *tabernae* existed in Rome during the reign of Tarquinius Priscus. The great difficulty is that as a form of architecture the *taberna* plan is generic and cannot be easily related to either specific form or particular cultural association.

The literary sources imply from their very beginnings *tabernae* expanded dramatically and by the end of the republic the *taberna* had become almost synonymous with the urban population. The steady expansion of trade around the Mediterranean, and the gradual process of romanization, no doubt had an effect on the proliferation of the *taberna*. However, this does not adequately explain how the *taberna* became so ubiquitous and could possibly be seen as a hallmark of Roman urbanisation. To quote from Boëthius 'once a tool had evolved into its most efficient form it remained unaltered', and this is exactly what can be said of the Roman *taberna*.[25]

ii) Contemporary Attitudes to *Tabernae*

To comprehend the position that *tabernae* held in the socio-economic development of the Roman world it is important to consider what society thought of *tabernae* and *tabernarii*. By the latter half of the first century B.C. the literary sources generally held shop proprietors in utter contempt and blamed them for many of society's ills.[26] It was the lifestyle associated with *tabernae* that made possible the climate of agitation that was central to the informal politics of the dying days of the Republic. Rome had developed a distinctive and elaborate social behaviour of low-status people that the élite were not sympathetic to and called 'low life'.[27] Plautus, who wrote in the second century B.C., describes the kind of undesirable people that could be found around the various shopping centres of Rome.

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[23] Boëthius, A. (1934) p. 167
[24] Purcell, N. (1994) p. 660
[25] Boëthius, A. (1960) p. 173
[26] Cicero *Dom.* 89-90
[27] Purcell, N. (1994) pp. 661 & 666

> 'Now for perjurers, try the Comitium. Liars and braggarts, by the shrine of Cloacina: rich married wastrels in stock by the Basilica. A good supply of harlots, too, if not in prime condition: also men for hire purchase. In the fish market, members of dining clubs, in the lower forum, respectable and well-to-do citizens out for a walk: flashier types, in the middle forum, along the canal. By the Lacus Curtius, bold fellows with a tongue in their head, and a bad purpose in mind-great slanderers of other people and very vulnerable to it themselves. By the old shops, the money changers-loans negotiated or accepted. Behind the Temple of Castor-but you'd better not trust yourself there. In the Vicus Tuscus, homosexuals, very versatile, turn and turn about'.[28]

Cicero (106-43 B.C.) expressed his contempt for those that worked and dwelt in the urban settlements in more than one passage. In his *pro Flacco* he mentions all the 'craftsmen, shopkeepers and all the scum of the cities'.[29] Cicero was not alone in this attitude as Livy stated that artisans and craftspeople were utterly unfit material for military excellence.[30] None the less, when the city was attacked in 426 B.C. by the Gauls the consul L. Aemilius Mamercinus had been compelled to recruit his legions from these classes. Pliny believed that the *tabernarii* were the very antithesis of elegance and civilisation.[31] Furthermore, Cicero in his treatise on Duties generally states that 'all gains made by hired labourers is sordid...'.[32] Cicero also explained how maritime cities suffered from corruption due to the influence of foreign ways and luxury that flowed in with traded goods.[33]

Dedication to commercial profit was often seen as being associated with greed and a lack of self-discipline. Favorinus (A.D. 80-150) and his circle agree with Sallust (86-35 B.C.) that avarice made a man's body and soul effeminate.[34] According to Petronius (254-184 B.C.) a devotion to money making can lead an individual to pick up a coin from a manure pile with their teeth.[35] Condescension can be seen in Livy's description of C. Terentius Varro, a consul of 216 B.C. 'he was of humble, indeed mean origin, and that his father is said to have been a butcher who retailed his own meat, and employed his son in

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[28] Plautus *Curculio* 470-481
[29] 18.9-10
[30] VIII. 20.4
[31] NH 33.49
[32] *de Officiis* I.42.150
[33] Rep 2.4.7-10
[34] Cat. 11.3
[35] Sat. 43.1

the servile office of his trade'.[36] The notion that manual labour deserved a wage does not seem to have been relevant to the thinkers and writers of antiquity. To be in business was thought to belong to the outsiders of the social circle. The *tabernarius* was one of the 'lower orders', and the assistant a menial. Modern attitudes to shopkeepers reflect their important function in contributing to the community.[37] This was not the case in ancient society where waged labour was seen servile and a source of shame and humiliation.[38] For the social élite wholesome income should come from property.[39] However, there may also have been resentment at the freedom that the lower class had as the *lex Claudia* of 218 B.C. forbade senators from trade.[40]

Epigrammatists ridiculed tradespeople that had grown wealthy and made a show of their riches.[41] Martial mentions that 'a shoemaker gave you a show in the cultivated town of Bononia, a fuller gave one to Mutina. Now where will the innkeeper give his?'[42] As far as Martial was concerned these traders were desperately trying to rise above their station. As far as he was concerned they were no more than their trade-no person at all.[43] These wealthy *tabernarii* were using their money to purchase the external badges of prestige. Like Juvenal's (A.D. 55-128) wealthy freedman, with five shops, who made claims to social standing based solely on what he had.[44] This attitude is exemplified by the treatment of Trimalchio, who might be described as a '*nouveau riche*'.[45] Trimalchio was a wealthy freedman that began his life as a slave from Asia. Once he gained some money by what were seen as sordid means he invested it in shipping, which was a highly risky but hugely profitable business, and became exceptionally wealthy. It was not his commercial activities that made him despised but his desire to abandon them to become and to act like his betters. Essentially, Trimalchio was attempting to buy respectability.[46] As Joshel neatly sums up

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[36] XX.2.25
[37] Beable, W.H. (1925) pp. 17-8
[38] Veyne, P. (1987) p. 121; Purcell, N. (1994) p. 659
[39] Duncan-Jones, R.P. (1976) p. 12; (1990) p. 126; Casey, P.J. (1985) p. 43
[40] Livy xxi.63.3; Balsdon, J.P.V.D. (1969) p. 130
[41] Guhl, E. & Koner, W. (1994) p. 519
[42] III.59
[43] Joshel, S.R. (1992) p. 65
[44] 1.101-6; Martial II.29; V.13, V.35; Horace Epod. 4; Joshel, S.R. (1992) p. 78
[45] Trimalchio is a fictional character but was probably based on a real individual during Nero's reign. Heseltine, M. (1975) trans of Petronius p. 60 fn. 1
[46] D'Arms, J.H. (1981) pp. 15, 83-4, 97-120; Wells, C. (1984) p. 178

'Money enabled the wealthiest freedmen to live like those in higher ranks of a social order in which the ex-slave had only second-class membership'.[47]

The ignoble status of the typical shopkeeper resulted in part from their preoccupation with earning money from trade and other mundane pursuits that ran contrary to the philosophical value system of the aristocratic writers. Merchants frequently came into contact with people from every social order especially those of a low-status. Worse than that they also had extensive dealings with foreigners and were continually suspected because of these ordinary associations.[48] The other bias against traders was that they were thought to be down right dishonest. This is evident from Ovid's (43 B.C.-A.D. 17) merchant's prayer.

> 'Wash away the perjuries of past time,' says he, 'wash away my deceitful words of the past day. Whether I have called you to witness, or have falsely invoked the great divinity of Jupiter, in the expectation that he would not hear, or whether I have knowingly taken in vain of any good goddess, let the swift south winds carry away the wicked words, and may tomorrow open the door to me fresh perjuries, and may the gods above not care if I shall utter any! Only grant me profits, grant me the joy of profits made and see to it that I enjoy cheating the buyer!' At such prayers Mercury laughs from on high, remembering that he himself stole the Ortygian kine.[49]

Of course these were the attitudes of those that did not have to toil with manual labour. A city of *insulae* and *tabernae* worried the ancient élite who objected to poverty and hated trade. Not all of the social élite disassociated themselves from the base trades. The home of the great Roman hero Scipio Africanus (236-183 B.C.) had adjoining *tabernae*, one of which was a butcher's shop.[50] The fact that numerous *tabernae* adjoined expensive and well-decorated houses, and in some case were even part of them, demonstrate that may of the upper echelons of society were amenable to acquiring profit and to let out their property for business purposes.[51] Even Cicero despite all his scorn and loathing of the manual worker let out property to *tabernarii*.[52]

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[47] Joshel, S.R. (1992) p. 82
[48] Sjoberg, G. (1960) pp. 183-4
[49] Fasti V.681-92
[50] Livy xliv.16.10; Wallace-Hadrill, A. (1994) p. 130
[51] Brion, M. (1960) pp. 121-2
[52] Atticus xiv.9.1

Many of the *fauces* floors of Pompeii were covered with decorative mosaics that were inlaid with a maxim or greeting. In the *Casa di Sirico,* VII.i.47, the declaration *salve lucro* 'hail gain',[53] in VI.xiv.39 *lucrum gaudium* 'gain is joy,'[54] *lucrum accipe* 'acquire a profit'[55] and more optimistically in II.viii.6 *cras credo* 'believe in tomorrow' can be found.[56] The maxim of the *Casa di Sirico* does not state 'hail money' or 'hail fortune' as money and fortune could be inherited. Instead, 'hail profit' seems to express an attitude and a whole way of life that was directed towards profit and the gain of wealth from commerce and industry. A more ornate mosaic can be found in the atrium of House VII, *Insula Occidentalis* 12-15, that has the depictions of four vessels with *tituli picti* identifying them as jars for *garum* and *liquamen.* They mention the name of the wealthy Pompeian fish-sauce producer and merchant Aulus Umbricius Scaurus.[57] The purpose of these mosaics must have been to attract the viewer's attention and to engage their interest. Not only do these mosaics advertise the person's wealth but also their business.[58] These seem to express the occupier's empathy and even willingness to partake in the profits of some form of trade rather than any abhorrence or moral objection to it. These maxims were directed at those entering the house that were of the same class and shared similar attitudes towards material gain. It is possible that they were designed as an invitation to profit itself.[59] However, this could have been the attitude of wealthy merchants who were now usurping the place of the earlier aristocracy.[60]

The context in which *tabernae* are most frequently examined is the *actio institoria* in the 14th book of the Digest.[61] Useful expenditure was that which improved the value of property, such as the addition of a bakery, shop or storeroom, while those for pleasure enhanced the aesthetics of the dwelling but had no returns. The lawyers were more concerned with property as an economic asset and speak of these utilitarian improvements

[53] C.I.L. IV.374
[54] C.I.L. IV.875
[55] C.I.L. IV.876
[56] Gusman, P. (1900) p. 256; MacKenzie, W.M. (1910) p. 53; Engelmann, W. (1929) p. 125; Frank, T. (1940) p. 255; Brion, M. (1960) p. 121; Curtis, R.I. (1984) p. 565; (1985) p. 213; Adam, J-P. (1994) p. 296
[57] Curtis, R.I., (1984) pp. 557-66
[58] Curtis, R.I. (1984) pp. 557 & 562
[59] Brion, M. (1960) p. 121
[60] MacKenzie, W.M. (1910) p. 53
[61] Buckland, W.W. (1970) pp. 169-74; Wallace-Hadrill, A. (1994) pp. 133-4

in positive terms. They show no objection to *tabernae* except those of ill repute as drinking houses or gambling dens.[62]

Literature that so frequently expressed the opinions of the upper echelons of society does not put forward those of the *tabernarii*. The lower classes, which society depended upon for its very existence, would probably not have been overly distressed at the disparaging comments of Cicero and others had they been leisured enough to read them. A more positive impression of the office of the shopkeeper and artisan is revealed by documents of a more popular origin. A robust pride and satisfaction in the occupation by which they earned their livings is indicated by their monuments and epitaphs. The information they provide is limited as they are a partial and restricted form of communication.[63] It should be noted that the epigraphic habit was not consistent in time, span or even social level across the empire.[64] The bias towards freed slaves in the city of Rome may be seen as a form of compensation for social stigmas suffered during life. What is shown is never random or accidental.[65] However, epitaphs are the best evidence for extending conclusions beyond the élite.[66] These were individuals who had sufficient pride and esteem in their pursuits to record them on their tombstones.[67] Funerary reliefs depict shop interiors and exteriors, fine counters and merchandise on display. One special characteristic of Roman art was its close connection with the realities of daily life.[68] Shopkeepers often present themselves as the heads of their own establishments. Merchandise and tools, like today, were valuable capital, signs of wealth rather than just the mere insignia of trade and are proudly displayed on tombstones. In fact the roles, activities and tools reveal an importance that was possibly more significant than individuality as facial features are not discernable.[69] They indicate more than just the profession of the deceased; they celebrate their position as the owner of a *taberna*.[70] There are few occupations that are not recorded in commemoration such as blacksmiths, poultry sellers, butchers and pharmacists. Despite this *taberna* owners appear to have lacked extensive

[62] Dig 47.10.26
[63] Hope, V.M. (1997) p. 245
[64] Taylor, L.R. (1961) pp. 113-132; Hopkins, K. (1966) pp. 245-64; MacMullen, R. (1982) pp. 233-46
[65] Hope, V.M. (1997) pp. 257-8
[66] Saller, R. & Shaw, B.D. (1984) p. 145
[67] Taylor, L.R. (1961) p. 129; Balsdon, J.P.V.D. (1965) p. 273
[68] Bandinelli, R.B. (1970) p. 62
[69] Hope, V.M. (1997) p. 251

material resources and the aspirations to some sort of social rank.[71] All their social endeavours may have been encapsulated in their occupation and pride in their business.

Overall, there seems to be diverse and contrasting opinions on the social status and economic standing of the *tabernarii.* They were thought to be ignoble and dishonest by the majority of the ancient sources who were reflecting the opinion of the upper echelons of society but this need not have been a belief accepted by the individuals themselves. It is regrettable that a more neutral source, other then the legal texts, does not survive that would typify the attitude of the populace to the *tabernarii* although it may be guessed that these feelings were mixed. In general, they were probably accepted by the population as a much-needed necessity even if this acceptance was begrudging on the part of the social élite. Whatever the attitudes to *tabernarii* the architectural form of the *taberna* had become just as ubiquitous in the urbanization of the Roman world as the shopkeepers had in literature and discussion.[72]

iii) Previous work on *Tabernae* in Britain

As pointed out in the introduction there has been no systematic attempt to analyse the *tabernae* of the Roman Britain in detail. In Britain, there has been a tendency to examine individual shops and workshop buildings as single entities and to make passing references to similar structures found elsewhere in the north-west of the empire but not to place the *tabernae* into the social and economic framework of Britain and the rest of the empire. A brief examination of industry in Roman Britain was carried out by Richmond for a conference held in the University of Leicester in 1963. This gave a summary of the shops excavated at that time, many of which will be dealt with in this thesis. It also attempted to place the shops into their contemporary framework and emphasised the similarity in function of shops in Roman Britain and those in Italy.[73]

One obvious exception has been the work carried out by Frere based upon the results of his excavations of *insula* xiv at Verulamium that began in 1955 and published in

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[70] Veyne, P. (1987) p. 133
[71] Joshel, S.R. (1992) p. 112
[72] Anderson, J.C. (1997) pp. 327

1972.[74] Verulamium (Figure 1) was one of the largest cities of Roman Britain and as Wacher points out in his review of the *Verulamium Excavations volume 1* Frere was one of the few to understand the importance of the complete stripping of a site if a difficult sequence of timber-framed buildings is to be understood. The consequence of this was that Frere was able to find a balance between the requirements of producing a reliable plan and an understanding of the historical development of the site (Figures 2-7).[75] Another valuable source for the excavations is the annual interim reports that were published in the *Antiquaries Journal.*[76] While these are a compilation of all the excavations carried out during these years *Verulamium Excavations volume 1* concentrates on the results gained from *insula* xiv that fronted Watling Street between the forum and theatre. The reasons given by Frere for concentrating on this *insula* was the great interest of the structures but also because the site provided a mass of pottery from which a type series was possible.[77]

What makes this excavation particularly interesting is that the excavated part of the *insula* appears to have been occupied from its formation by a range of timber-framed buildings that served as shops and workshop. The complex also adjoined the centre of the town.

As Wacher points out the report does have certain limitations. Although the area seems to have been given over to retailing and manufactories especially metalworking little is reported on the significance of the metallurgical deposits. Some of the crucibles found on the site are reputed to have had gold adhering to them while others are recorded as being unspecified metals. One of the most interesting finds in the form of bronze workers' waste-tubs receives little analysis. Furthermore, there was no attempt to link the metal waste remains with the finds inside the dwellings.[78]

Frere drew several conclusions based upon the excavated material that are discussed in this thesis. Although these conclusions are open to question they are an attempt to place the *insula* into some sort of social framework within Roman Britain. In his review of the report Rüger states that 'Professor Frere and his collaborators have shown how an *insula* of

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[73] Richmond, I.A. (1966) pp. 76-86
[74] Frere, S.S. (1972)
[75] Wacher, J.S. (1973) p. 347
[76] Frere, S.S. (1956) pp. 1-10; (1957) pp. 1-15; (1958) pp. 1-14; (1959) pp. 1-18; (1960) pp. 1-24; (1961) pp. 72-85; (1962) pp. 148-59
[77] Frere, S.S. (1972) p. 3

a Roman city should be published'.[79] The report had a great influence on future work the most notable of which was Wacher's Cirencester excavation.[80] The impact of this accomplishment by Frere on this present work has been considerable.

In 1961 Wacher carried out an excavation of what were thought to be shops in *insulae* ii and v at Cirencester (Figures 8-9).[81] This rescue excavation revealed a complex sequence of buildings. *Insula* ii was in the centre of the settlement and lay across Ermine Street and was south-west of the *forum basilica.* Early buildings within comprised timber structures that were replaced by stone buildings fronted with a colonnaded walkway. The plan of these structures remained constant suggesting that it may have had a public function.

Insula v was located to the south-east of *insula* ii, on the crossroads of the Forum and other public buildings and west of Ermine Street (Figures 10-11). The structures of the *insula* were initially built in timber but in the late first century they were constructed in stone. The excavation also revealed that these dwellings were continually altered and modified during their lifetime. Although the investigation of the front rooms was limited all the shops had ovens or hearths of some form and the lack of metallurgical refuse indicates that the buildings probably specialised in the sale of food or other organic substances.

Building development close to the Roman town centre resulted in excavations carried out by McWhirr in 1974-5. This uncovered several strip-buildings in *insula* vi that were thought to have been shops located south-east of the forum that fronted onto Ermine Street (Figure 12).[82]

The sites were later re-evaluated by Holbrook and this largely concurred with the findings of the earlier reports but presented in more detail.[83] The discussion of *insula* v draws a parallel with *insula* xiv at Verulamium in greater detail, and draws a further analogy with *tabernae* found in Pompeii and Ostia. The report also gives details of further

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[78] Wacher, J.S. (1973) p. 351
[79] Rüger, C.B. (1973) p. 157
[80] Wacher, J.S. (1962) p. 11; (1973) p. 348
[81] Wacher, J.S. (1962) pp. 1-14
[82] McWhirr, A.D. (1978) pp. 61-80
[83] Holbrook, N. (1998)

excavations in 1972 to the west of the shops excavated by Wacher (Figure 13). This produced further evidence of two more structures on the corner of the *insula*.

The early excavations of Wroxeter (Figure 14) in 1912-14 by Bushe-Fox produced several open-fronted buildings that lined the western street of *insula* vii.[84] A considerable amount of occupation and industrial material was discovered. The site shows several modifications throughout their lifetime and three of the initial strip-buildings were amalgamated into single premises. The forum complex that was excavated by Atkinson from 1923-27 uncovered the stock-in-trade of retailers that sold their wares from stalls under the outer eastern portico of the forum.[85] This living assemblage was the result of a fire that devastated the forum in the middle of the second century and forced retailers to abandon their stock. Both sites provide a good indication of the retailing activities that took place in a major settlement of Roman Britain.

A number of residential and commercial premises have been identified in Colchester (Figure 15). The most interesting of these were two pottery shops in *insulae* xix and xxviii found in 1927. These sites were not excavated but details of the finds were published by Hull.[86] The most recent excavations concentrated on the buildings to the south of the settlement in *insulae* xxxiv-xxxvi (Figures 16-17) and also on the extra-mural structures near the north gate (Figure 18) during 1971-4.[87] The structural remains are discussed by Crummy and the excavations, like those carried out in London, follow the development of the buildings from their foundation to the end of the settlement allowing a study of structural techniques and room usage adopted during the Roman period.

The domestic buildings excavated in the Walbrook area of London during 1972 to 1980 have been placed in a single report.[88] The report gathers together the excavations of Newgate Street, Milk Street, Watling Court and Ironmonger Lane (Figure 19). As is pointed out in the introduction each site 'contributed to a coherent picture of the early growth of a district whose identity was also defined by natural topography'.[89] The report gives an excellent review of developments of building technique in Roman London. There

[84] Bushe-Fox, J.P. (1913); (1914); (1916)
[85] Atkinson, D. (1942)
[86] Hull, M.R. (1958)
[87] Crummy, P. (1984)
[88] Perring, D., Roskams, S. & Allen, A. (1991)
[89] Perring, D., Roskams, S. & Allen, A. (1991) p. 1

are also useful summaries on the subjects of hearths, ovens, roofing, property boundaries, room function, wall plaster, mosaics and the general economic and social development of the dwellings in the area of the Walbrook. The excavation of Newgate Street revealed that it was composed of a more mixed building type that included commercial and industrial premises and was not solely residential. The most significant aspect of this work is the comparison of Building K at Newgate Street and the plan of a building from Herculaneum (Figure 20). This attempts to place the dwellings of Roman Britain into the framework of the wider Roman empire and avoids the insular perspective of many excavation reports. This is completely justifiable as these long rectangular blocks or strip-buildings were a type presumed to be of Latin origin[90] and were ubiquitous throughout Roman Britain. This has allowed for some definition of room function from the better preserved *tabernae* from Italy. The result of this has been that there seems to have been a parallel between internal buildings arrangements between Britain and Italy. This method has been adopted throughout this thesis.

Silchester (Figure 21) is probably the most completely excavated town of Roman Britain. Excavations began with the aim to uncover the whole site at the end of the nineteenth century but finished in 1909. The result of each year's work was subsequently reported in *Archaeologia*.[91] The work was undertaken with little knowledge of the value of stratification evidence. This meant that precise dating was absent and a great deal of archaeological information was lost. However, relatively accurate and complete building plans for the later masonry structures were gained from the excavation. Few of the buildings probably date to before A.D. 150.[92] A re-excavation of the site began on the defences in 1974,[93] which were followed by the amphitheatre.[94] Work then concentrated on the centre of the town with an excavation carried out on the forum from 1980-6. This eventually extended to *insula* ix that was located to the north-west in 1997. Although this

[90] Boethius, A. (1960) pp. 137-9
[91] Fox, G.E. & Hope, W.H. (1890) pp. 733-58; (1893) pp. 539-73; (1894) pp. 199-238; (1901) pp. 229-56; Fox, G.E. (1892) pp. 263-88; (1895). pp. 439-94; Hope, W.H. & Fox, G.E. (1896) pp. 215-6; (1898) pp. 103-26; (1899) pp. 229-50; (1900) pp. 87-112; (1905) pp. 333-70; Hope, W.H. (1897) pp. 409-30; (1902) pp. 17-36; (1903) pp. 413-28; (1906) pp. 149-68; (1907) pp. 431-50; (1908) pp. 199-218; (1909) pp. 473-87
[92] Fulford, M. (1984) p. 41
[93] Fulford, M. (1984a)
[94] Fulford, M. (1989)

concentrated on a substantial building to the north-west of the *insula* this has produced interesting results concerning dating and the exactness of the original building plans.[95]

The excavations of large parts of the town plan of Caerwent (Figure 22) was primarily as a result of the work carried out in Silchester and began in 1899 and concluded in 1913.[96] The aim of the excavation, as in Silchester, was to recover the later building plans to determine their function. As with Silchester chronological details of the site are lacking. It was not until the later excavations in 1948-9 that the earlier timber phases of buildings were examined.[97] The re-excavation of the Romano-Celtic temple site and forum has provided new light onto the history of the town.[98] Despite the limitations of both sites Silchester and Caerwent are exceptionally interesting as buildings can be examined in relation to other structures and the town plan in general.

Excavations have revealed that Britain was a place diverse in buildings of all types and construction, ranging from the simplest strip-house to elaborate basilicas. It is difficult to determine the function of any building in Roman Britain, when the remains consist of little more than a few elements of the sub-superstructure to indicate some form of plan. Although the lack of substantial archaeological evidence may be off-putting, some idea of what the buildings of Roman Britain must have once looked like can be gained by a comparison with other regions of the Empire. Elsewhere in the Empire exceptionally vivid remains of similar structures exist in towns like Pompeii, Ostia and Herculaneum.

[95] Fulford, M. & Clarke, A. (1999) pp. 176-80
[96] Martin, A.T. & Ashby, T. (1901) pp. 295-310; Ashby, T., Hudd, A.E. & King, F. (1902) pp. 119-52; (1904) pp. 87-124; (1909) pp. 565-82; (1910) pp. 1-20; (1911). pp. 405-48; Ashby, T. (1903) pp. 391-406; (1905) pp. 289-310; (1906) pp. 111-30; (1907) pp. 451-64; Hudd, A.E. (1913) pp. 437-52
[97] Dunning, G.C. (1948) pp. 56-9
[98] Brewer, R.J. (1990) pp. 75-85

Chapter II

Construction Techniques

The general aim of this thesis is to interpret the excavated and recorded evidence in order to give an approximate reconstruction of the *tabernae* of Roman Britain. This chapter will examine the types of materials used in the building of *tabernae*. It will describe their methods of construction and how they developed over time. This analysis of construction techniques attempts to answer two questions; how the *tabernae* were constructed and who built them. Based on this some possible suggestions are made concerning the process of romanization for many of the inhabitants of the towns of Roman Britain. The study of building construction focuses on the most fundamental consideration of how people executed the structures that provided them with shelter and a viable environment for their goods, institutions and life style. Thus the focus is on this pragmatic operation and any concern with aesthetic design is purely incidental. Every attempt has been made to be as inclusive, comprehensive and systematic as possible in the study of constructional techniques in Roman Britain. However, the amount of evidence has necessitated a certain amount of selection and much of the following work will concentrate upon the larger settlement sites of Verulamium, Colchester and more particularly London. The reason for this is that much of the detailed analysis of early dwelling materials has taken place in these locations.

One of the superficial features of the Roman empire was its uniformity that resulted in the consequential similarity in its building programmes, so that its towns and cities consisted of the same categories of buildings produced according to almost analogous standards. This disappears upon closer examination of the buildings themselves. Roman architecture was not absolute, rigid or stagnant. Construction was a perpetual and continuous practice throughout the Roman empire that varied over time.

On a microscopic level the evolution of viable techniques of construction practices has varied from place to place, depending upon factors such as materials, equipment, work force, the stage of technical development, the needs of society and the state of the economy. Architecture is intimately connected to its political and social environment. An overall

examination of Roman buildings can reveal a great deal of the spirit of the empire as accurately and precisely as any of the writings of the well-known Roman historians. The material remains of Roman Britain have meanings that are socially communicative and from which it is possible to gain an insight into the civilisation that created them.

A building is not simply a reaction to the local environment, but represents a complex series of choices made by the client, designer and builder set against a background of economy, technology, tradition, availability and the function of the building. Within many past societies the distinction between client, designer and builder is meaningless because they were identical. A building can be seen as the reflection of these multiple choices by a range of interested groups, some on a rational plane, some unconscious and some that seem irrational. The process of building, from commissioning to construction, was one in which social interaction and negotiation was not incidental but essential. A house was not invented in the simple sense but its form was negotiated between numerous social groups, and the final outcome was the result of those negotiations. When groups within a society have contributed to the final form, the structure reflects that society as a whole.

The building technology adopted indicates a great deal concerning the economic and social standing of the inhabitants contained within. This is even more intuitive in the case of retail establishments as they would have been more directly affected by the fluctuations and nuances of their immediate economic environment. It emerges from this that a systematic examination of the building techniques of the *tabernae* of Roman Britain, and other private dwellings, give a more justifiable and possibly realistic perspective of the economic and social progression of towns, but also the development of the province as a whole.

From a structural point of view the archaeologist in Roman Britain is usually confronted with little more than the wall footings and remnants of a once whole building. Therefore the majority of the evidence will be fragmentary. The consequence is that this study has had to resort to some extent to conjecture, reasoning and informed intuition. Inference and deduction has been resorted to in cases where the remaining evidence of building practices is either incomplete or inconclusive. Amelioration can be found in the

fact that no reconstruction is ever likely to achieve total accuracy no matter how carefully excavated and analysed.

Possible analogies to Roman construction techniques in Britain can be gained from the study of surviving structures from later periods, for example fifteenth and sixteenth century medieval houses in England, traditional houses in Ireland and the earth built houses of modern day Africa. Due to the recent discoveries of the well preserved building remains in Southwark and Cannon Street (Figure 23) in London it is now possible to reconstruct some Roman dwellings from the foundations to wall-plate level. The methodology that has been adopted is to look at the building materials and techniques adopted from the archaeological data. Anthropological studies have then been used to illuminate some of the social factors that may have been involved in construction.

i) Building Materials

The Roman builder was governed by the material he or she worked with.[1] Most of the materials employed in the assembly of the early *tabernae* of Roman Britain were probably those most readily available. While this can be more or less proved archaeologically when the materials used were local stone or clay it can merely be inferred with timber. Initially these materials may have been easy to appropriate. In 390 B.C. most of the domestic quarters of Rome were destroyed by Gallic tribes. After the Gauls were expelled, Livy states that the people started to fashion a new city, and to aid them in this task the state supplied tiles, and granted everyone the right to quarry stone and to hew timber from where they liked.[2] A similar need to quickly house a substantial number of people in a relatively short length of time would have existed after the Roman invasion of Britain. The cost of materials and land are critical issues in determining the rate of spontaneous settlement growth and consolidation.[3] It is possible that a similar grant was in existence during the foundation of Roman Britain.

[1] Ward, J. (1911) p. 255
[2] V.55.2-5.
[3] Gilbert, A. & Gugler, J. (1982) p. 92

The materials available to the Roman builder varied from province to province forcing them to think, adjust and innovate.[4] For this reason the Romans were not apprehensive about utilising and adopting local techniques already established in the new province as their own when they fitted into their own construction schemes.[5] In this respect Britain offered nothing new to the Roman builder.[6]

1) Timber

Apart from the ground plan, more than any other single component the choice of walling material establishes the character of vernacular architecture.[7] Timber was initially abundant and became the basic building material for the whole of temperate Europe. As a consequence, it was extensively used, either fully or in part, in early structures.[8]

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[4] Tuan, Y-F. (1981) p. 104
[5] Adam, J-P. (1994) p. 121
[6] Ward-Perkins,J.B. (1970) p. 18
[7] The term vernacular architecture is taken to mean those dwelling that were not civic or belonging to the social élite.
[8] This is evident from the ancient authors when they describe Britain constantly make reference to the fact that it was flat and overgrown by forests. Strabo IV.5.1. (199 & 200); Caesar B.G. IV.32; V.15; V.19; V.21 during his military exploits Caesar constantly refers to the wooded nature of the terrain. As does Dio Cassius LX.19.5. While later authors refer to the fact that heavily forested areas remained in Northern Britain, is well illustrated by references to the problems presented to advancing armies during the campaigns of both Agricola and Severus. Tac. Agr. 25.1; 26.2; 31; Herodian III.14.10; Dio Cassius LXXVII.31.1. It is hardly surprising and to use Hanson's words 'in terms of soil and climatic suitability, there are few areas in Britain that under the "climatic climax" conditions could not support woodland'. In other words 'vegetation is the final stage of a natural succession under approximately constant climatic conditions'. Hanson, W.S. (1978) p. 293 Fn. 5. The most obvious advantage of a heavily forested region was that trees could be felled locally, and a minimum amount of effort was required to convert it into lumber and transport it for construction. Hanson, W.S. (1982) p. 169; Goodburn, D. (1991) p. 190 In recent years a great deal of work has been done by specialists in ancient timbers. It would seem from site pollen analysis and the increasing archaeological evidence of extensive arable agriculture that deforestation was well underway in the Neolithic period. Rackham, O. (1980) p. 6. Rackham makes the tentative estimate that about half of England had already ceased to be woodland by the early Iron Age. Rackham, O. (1988) p. 35. Even if pollen analysis indicates a significant reduction in tree pollen there is no simple correlation between the percentage of pollen and of forestation. Woodland must still have been an integral part of that landscape which is supported by the presence of microscopic remains of a wide variety of tree species on Roman sites, in the form of bark, twigs and leaves that is unlikely to have originated from non-local timber. Hanson, W.S. (1978) p. 294. Pollen analyses from urban sites are extremely local. Analysis from lakes is not marked by settlement and gives a better picture of the surrounding landscape. Dark, P. (1999) p. 247. It would seem form the more general study of pollen analysis by Dark has shown that woodland remained through out the Roman period but this was rapidly declining from A.D. 80-340. Dark, P. (1999) pp. 253-4 Accepting that there is a noticeable tendency for the Classical authors to rely more on dramatic effect and literary style than on historical accuracy, woodlands were still a consistent feature of their accounts of campaigns in the North of England Hanson, W.S. (1996) pp. 356-7.

The great advantage of timber as a building material was its relative durability that combined compression robustness with elasticity and tensile strength as well as being relatively easy to work with. Masonry by contrast does not combine these qualities as it can only resist tensile stresses to a limited degree.[9] Timber in ancient society was the only construction material that complete structural frameworks, or component parts such as beams, purlins and rafters, could be made until the innovation of modern metallic forms.[10] The basic advantages of timber as a constructional material were three fold; wider availability, easier conversion and speedier erection. It was these factors, rather than any consideration of how long the site was to be occupied, that influenced the decision on the building materials to be employed by the early occupants of the towns of Roman Britain.[11]

2) Clay

Ever since people first congregated in settlements, almost 10,000 years ago, earth has been one of its principal building materials. Clay has been utilised in some form on every continent of the world.[12] It is a simple and obvious building material, as clay constitutes almost 75% of the earth's crust.[13]

Wet clay has excellent adhesive properties and unlike may other constructional materials it can be formed into almost any shape and maintain this form upon becoming solid. However, once it dries it loses all its plasticity and malleability and contracts causing cracks on the surface and if too much water is added the clay becomes too dispersed. Clay had the obvious advantage that earthen materials were available on the surface of the building site or could be quarried nearby.[14] This has been consistently shown by petrologic studies of medieval burnt daub.[15] It is likely that a similar study of Roman daub would acquiesce with these findings.

Although clay deposits are widespread they are rarely of uniform consistency. In some cases sand is added to the earth, or some other non-swelling material that has a

[9] Fitchen, J. (1986) p. 131
[10] Davey, N. (1961) p. 32
[11] Hanson, W.S. (1982) p. 169
[12] MacDonald, F. & Doyle, P. (1997) p. 17
[13] Dethier, J. (1982) pp. 7, 23, 133
[14] Brumskill, R.W. (1978) p. 50; Oliver, P. (1987) p. 79
[15] Schofield, J. & Vince, A. (1994) pp. 106-7

greater particle size than that of clay, which gives it strength and stability.[16] Some soils already contain the correct distribution of clay to sand ratio. London was lucky in this case as it had an abundant supply of brick-earth that had a high sand content but was plastic enough to be used in construction. London clay by contrast was far too fine and could not be used by itself. [17]

The addition of grass like substances greatly improved the mechanical properties of earth. Straw is reported to improve the strength of the clay by some 244%,[18] and was added by scattering in a series of layers to the mix as it was turned over.[19] Chopped straw of about 100-150mm in length is the most common fibrous addition to clay buildings. In fact Vitruvius recommends its use in clay-bricks.[20] The daub remains from Building J at Newgate Street, London, period vii (A.D. 100-125), contained stalk, leaf and blade impressions. Daub fragments belonging to period iii Building C (A.D. 50/55-60), had stalk impressions of up to 3mm in width. This was found in the construction levels of Building H during period v (A.D. 70/80-85/90).[21] Despite these examples the addition of fibrous organic materials seems to be poorly represented in London.[22] Cellulose fibres disappear rapidly once they have been buried in soil and this may account for their poor representation. In view of this fact it is not surprising that they are often not detected.[23]

The initial preparation of clay, whether it was to be used as daub for wattling, bricks or clay walling was more or less the same. Nearby sub-soil would be gathered, or taken from the foundations and placed near the wall, broken up and placed into a pit. Then water would be added but only enough to make the clay plastic.[24] The mixture would then be trodden under foot or rammed with some implement designed for the job. The purpose of the ramming was to expel air from the clay and compact the material, as well as to drive out

[16] Carson, A. B. (1965) pp. 82-6
[17] Milne, G. & Wardle, A. (1996) p. 57
[18] Fn to Vit. II.iii.1 in Grangers translation of the text.
[19] Ashurst, J. & Ashurst, N. (1989) p. 93; MacDonald, F. & Doyle, P. (1997) p. 12
[20] II.iii.1
[21] Perring, D., Roskams, S. & Allen, P. (1991) p. 76
[22] Perring, D., Roskams, S. & Allen, P. (1991) p. 67
[23] Torraca, G., Chiari, G. & Gullini, G. (1972) pp. 262-3
[24] Harding, D.W., Blake, I.M. & Reynolds, P.J. (1988) p. 100; Ashurst, J. & Ashurst, N. (1989) p. 89; MacDonald, F. & Doyle, P. (1997) pp. 8, 13-14, 20. The plasticity of clay defines the range of water content as a percentage of the weight of the solids. Carson, A. B. (1965) p. 86

some of the excess moisture. At this stage any tempering materials or other additions would then be added.[25]

Brick-earth was extensively quarried throughout London in all periods.[26] Initially it was normally quarried on site or near the vicinity of the building that it was going to supply. The general distribution of quarries on many sites, such as at Watling Court, is consistent with this.[27] The later intrusion of pits indicates that builders on near-by sites were taking full advantage of its slow redevelopment after its destruction by an early Flavian fire.[28] A large quarry pit, some 15m long, was dug in area W at Leadenhall Court beside Building 2 in the mid first century.[29] There was some small scale quarrying on the Newgate Street site before the construction of Building H (period VI, A.D. 75/85-90), that has a substantial quarry pit near to the north of the structure which was probably used in the extraction of materials for its construction. This practice would have been more difficult in later periods as sites filled.[30] What makes this site particularly interesting is that the quarry seems to respect the limits of its eastern property boundaries.[31] Evidence of a greater scarcity of brick-earth can be seen in the later pits that were dug more deeply to extract as much material as possible. In other cases supplies must have been imported onto the site. The quarrying in the peripheral areas of the settlement would have supplied such demand. In the eastern part of site 53, Cannon Street, large pits were excavated which were far too expansive to be anything other than quarries for external use beyond the region. This may possibly point to the commercial exploitation of brick-earth as builders exhausted local supplies.[32]

It seems likely that rather than using new material that was less accessible, many constituent elements were salvaged from the demolition of earlier structures. In fact the most successful mixes of daub were obtained by reconstituting the material and mixing it

[25] Ashurst, J. & Ashurst, N. (1989) pp. 89-90, 120
[26] Milne, G. & Wardle, A. (1996) p. 57
[27] Other examples of quarries can be found at 13-16 Bevis Marks for the second and third centuries see Richardson, B. (1981) p. 44; Cutler Street see Richardson, B. (1981) p. 44; Fenchurch Street see Heathcote, J. (1989) p. 49; Leadenhall Court see Milne, G. & Wooton, P. (1990) p. 179; St Mary Axe and St Helen's Place see Filer, J. (1991) p. 277; St Mary Axe at Hill see Greenwood, P. & Maloney, C. (1996) p. 8
[28] Richardson, B. (1980) p. 384; Roskams, S. (1980) pp. 403-5; Perring, D., Roskams, S. & Allen, P. (1991) p. 29
[29] Milne, G. & Wootton, P. (1990) p. 179
[30] Perring, D., Roskams, S. & Allen, P. (1991) p. 12
[31] Roskams, S. (1980) p. 405; Perring, D., Roskams, S. & Allen, P. (1991) p. 9
[32] Perring, D., Roskams, S. & Allen, P. (1991) pp. 67 & 117

with fresh earth.[33] This has been noticed in several ways. The first is the absence of clay destruction débris. There is evidence of trenches dug at Ironmonger Lane in period II to rob brick-earth. Reuse can be seen by the incorporation of alien inclusions such as fragments of plaster in the wall mass, a feature also noticed in Ironmonger Lane.[34] This would explain the wide distribution of vessel sherds at Verulamium *insula* xiv, both spatially and chronologically, and its inclusion in walls. The only cases in which the reuse of débris could not occur, was when the structure had been burnt and the earth had turned into fired-clay. Very little of this material exists *in situ* from the Boudiccan destruction level at Verulamium. It is presumed that this débris had been removed from the site.[35] The clearance of débris would seem a logical prerequisite, as the removal of rubble and upstanding walls would have been part of the preliminary re-building process.

The reuse of building materials is not unique to Britain nor is it restricted to earth buildings. There are numerous walls in the *Insula del Menandro*, in Pompeii, that contain extraneous débris in the *opus incertum*, especially fragments of bricks, tiles and wall plaster. Some of these belong to walls that were constructed after the earthquake of A.D. 62 but this is not always the case.[36] Walls from the late first century B.C. to the mid-first century A.D. contain a great deal of débris salvaged from demolition work.[37]

3) Stone

The 2nd-3rd centuries saw the relative widespread change in building materials from timber to stone.[38] During the Roman period local stone was used extensively for the bulk of the construction, particularly in private building. Imported stone was only resorted to when it was intended for decorative effect.[39] Normally only one type of stone is available in the immediate vicinity and its identification is relatively straightforward.[40]

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[33] Wright, A. (1991) p. 100
[34] Perring, D., Roskams, S. & Allen, P. (1991) p. 67
[35] Frere, S.S. (1972) pp. 9-10
[36] Ling, R. (1997) p. 15
[37] Ling, R. (1997) p. 231
[38] Williams J.H. (1971) p. 169; Burnham, B.C. (1995) pp. 9 &13; Wacher, J.S. (1995) p. 207; Burnham, B.C., Keppie, L.J.F. & Esmonde Cleary, A.S. (1996) p. 431
[39] Blagg, T.F.C. (1990) p. 49
[40] Adam, J-P. (1994) p. 21

Stone is a heavy concentrated mass of material, the transportation of which was affected by the size and type of project that was being carried out.[41]

It would appear that it was not until the Roman period that stone was quarried on any scale.[42] Tacitus mentions in his description of the Belgic and Germanic tribes that they did not make use of stone cut from quarries.[43] To build in the Roman manner involved not only the introduction of new methods of construction but also had implications for quarrying and supply of stone.[44] So much stone was quarried during the Roman period that their descendants had access to large quantities of building materials when the towns were re-occupied in the late Saxon period.[45]

The development of private stone buildings and *tabernae* within towns was comparatively slow. Use of stone was late in Gaul so its slow adoption in Roman Britain is not unusual and it does not represent a rapid application of resources.[46] Where there was a good supply of stone it was not a question of supply but of technology.[47] Almost all of the first century stone buildings of any grandeur were erected at public expense although some unpretentious early buildings are known in Canterbury,[48] Colchester[49] and London.[50] Masonry construction was the traditional method of monumental architecture for the Romans and it was regarded as the form of construction *par excellence*, durable and aesthetically pleasing.[51] Verulamium is seen as a good example of this slow development to stone, and this change might have been even longer had it not been for a massive fire in about A.D. 155 that destroyed a great deal of the town.[52] In the case of *insula* xiv the timber-framed shops had been rebuilt at least three times before the shopkeepers were provoked into building in stone, or at least structures with stone footings. One reason for this may be that Verulamium like Colchester, Canterbury and London are in areas of poor

[41] Rockwell, P. (1994) p. 9; Ling, R. (1995) p. 19
[42] Davey, N. (1961) p. 3; Parsons, D. (1990) p. 1; Reid, M.L. (1993) p. 7. Stone was certainly quarried in the Iron Age but this was for querns and not for building.
[43] Germ. xvi
[44] Blagg, T.F.C. (1990) p. 33
[45] Schofield, J. & Vince, A. (1994) p. 103
[46] Blagg, T.F.C. (1990)p 34
[47] Blagg, T.F.C. (1990) pp. 37-8
[48] Williams, A. & Frere, S.S. (1948) pp. 1-45
[49] Hull, M.R. (1958) p. 83
[50] Lombard Street in Merrifield, R. (1965) p. 248; Gracechurch Street in JRS 25 (1935) pp. 215-6; Merrifield, R. (1965) p. 257
[51] Ling, R. (1985) p. 18

natural building stone. Stone building material was available over much of the south-west but there is little indication that stone as a form of construction was adopted at an earlier date for instance in Cirencester than anywhere else.[53] The adoption of local stone only occurs in Ilchester from the later second or early third century.[54] Silchester is particularly interesting, as it is less then 10km away from an unlimited supply of flint.[55] Similarly Dorchester where there are good supplies of Purbeck Limestone, Lias Limestone and Ham Stone only adopted stone structures in the third century.[56]

Quarrying is one way of acquiring stone, but despoiling earlier buildings was probably frequently practised in many periods.[57] This is a custom that has prevailed throughout the ages but it is especially prevalent in masonry structures. It is impossible to assess the number of buildings that have been obliterated or extensively pillaged of masonry for later reuse.[58]

The absence of good building stone in the immediate neighbourhood of London led to the extensive robbing of walls that are only indicated by robbers' trenches. As a consequence a great deal of the later buildings and *tabernae* of Roman Britain may have been fully constructed in stone but their surface remains above the foundations are absent due to robbing.[59] A need for building materials perhaps led to the subsequent robbing of the Ragstone and flint foundations of an earlier building upon which a subsequent mid to late second century structure in Telegraph Street rested.[60] Three robbed walls were noted in Gracechurch Street.[61] In Cornhill the foundations of three successive phases of masonry buildings were robbed during the Roman period.[62] Robbing has also been noted on a late

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[52] Williams J.H. (1971) p. 169
[53] Wacher, J. S. (1966) p. 79; Williams, J.H. (1971a) p. 99; Darvill, T. & Garrard, C. (1994) pp. 29-30; 84
[54] Leach, P. (1982) p. 8
[55] Fulford, M. (1985) pp. 39-76; (1989) p. 182; Blagg, T.F.C. (1989) p. 211. However, flint is a difficult stone to use and must be bedded in mortar.
[56] Draper, J. & Chaplin, C. (1982) pp. 25, 33, 57
[57] Rockwell, P. (1994) p. 143
[58] Fitchen, J. (1986) p. 33
[59] Merrifield, R. (1965) p. 17
[60] Maloney, C. & de Moulins, D. (1990) pp. 60-1
[61] *J.R.S.* 25 (1935) p. 216
[62] Heathcote, J. (1989) p. 48

building in number 1 Poultry.[63] The great advantage of scavenged stone was that it could be reused unchanged and often does not require reworking, but rather a refinement.[64]

4) Site preparation and foundations

It would seem that there was some preliminary ground preparation before construction. The minimal arrangements that normally took place were confined to the de-turfing and levelling of the site. The absence of topsoil in the regions of Culver Street[65] and North Hill[66] at Colchester suggest that it and part of the underlying subsoil were removed before construction. At Leadenhall Court the evidence of root-lets indicates that the upper course of turf and undergrowth had been removed. This occurrence has also been noted on sites at Milk Street, Regis House and Watling Court in London.[67] In area W at Leadenhall Court and Fish Street Hill there were several large depressions, which marked the former location of a small cluster of trees, or bushes that had been uprooted and removed.[68] In some cases, such as at Ironmonger Lane, Well Court, Leadenhall Court and Watling Court, once this initial preparation had been completed, clay, or brick-earth slabs were laid to infill any intrusive features and create a level building platform.[69]

The preparation of good foundations is the first concern of a builder. The foundation is usually described as being that segment of the earth's subsurface on which a structure is placed, and the lowest or contact portion of that structure itself.[70] It is the footings that must take the weight of the building so precautions must be taken to ensure its stability and to prevent it sinking. Vitruvius mentions that the builder should dig as far as the solid ground and into this as far as is necessary for the size of the structure.[71] A certain

[63] Burch, M., Hill, J., Jones, S., Lees, D., Rowsome, P. & Treveil, P. (1997) p. 135
[64] Rockwell, P. (1994) p. 196
[65] Crummy, P. (1992) p. 37
[66] Crummy, P. (1992) p. 128
[67] Watling Court see Perring, D. (1981) p. 105; Perring, D., Roskams, S. & Allen, P. (1991) p. 26. This occurrence can also be seen at Bishopsgate see Milne, G., Bateman, N., & Milne, C. (1984) p. 396; Gracechurch Street see Richardson, B. (1984) p. 48; Beacon Grove see Greenwood, P. & Maloney, C. (1995) p. 347; St Mary Axe, Bury Street see Greenwood, P. & Maloney, C. (1996) p. 8
[68] Milne, G. & Wootton, P. (1990) p. 179 On the Fish Street Hill site the natural clay and gravel had been cut back for the construction of the Neronian quay to create a level platform for building. Brigham, T., Watson, B., Tyers, I. & Bartkowiak, R. (1996) pp. 34-6
[69] Carson, A. B. (1965) p. 278
[70] Carson, A. B. (1965) p. 262
[71] I.ix

amount of settlement should not be feared as many foundations, even modern ones, allow minor settlements provided that they occur uniformly.[72]

Often the remains of timber-dwellings are confined to post-holes and trenches, as these were the only foundations necessary.[73] Wood is an ephemeral material and the timber members, which these depressions contained, will have rotted away, and it is only through the carefully examination of trenches and post-hole patterns that any building form will be revealed. This is made even more difficult as buildings with intricate timber-frameworks can be bolstered on relatively slight foundations such as on stone pads, clay or some other firm material that leave virtually no trace of the superstructure.[74]

A variety of basic construction methods has been observed. Normally there are three different types of depressions that can be identified on the surface; those formed by posts driven straight into the ground (stake-holes), uprights individually set into holes (post-holes) and those cut into the ground to take the base of an upright (post-pipes).[75] The superstructure could then be tied, wrapped, pegged or nailed on and around these timber uprights. Essentially these techniques are the same as they imply the erection of uprights that are individually held in place during the building process.[76]

A more sophisticated method existed which involved the provision of trenches for timber ground-beams.[77] These horizontal joists were designed to form the base for uprights that were mortised to receive them. The disadvantage of this form of construction is that it can be difficult to distinguish sleeper-beams from post-trench techniques unless the timbers themselves survive.[78] If post-impressions are evident then sleeper-beam construction is presumed not to have been used. However, this is overly simplistic as in a few cases, for example at Valkenburg and Cannon Street, it can be shown that the tenons were pegged straight through the sleeper-beams into the subsoil.[79] A further complication is that this method can be used with stonewall bases, used to underpin ground-sills, which are likely to leave traces that are indistinguishable from walls solely constructed in stone or clay. No

[72] Carson, A. B. (1965) p. 76
[73] Audouze, F. & Büchsenschütz, O. (1989) p. 75
[74] Audouze, F. & Büchsenschütz, O. (1989) p. 62
[75] Crummy, P. (1984) pp. 20-3; Perring, D., Roskams, S. & Allen, P. (1991) p. 71. Crummy uses slight variations of these terms to describe similar methods of construction.
[76] Harding, D.W., Blake, I.M. & Reynolds, P.J. (1988) p. 95; Audouze, F. & Büchsenschütz, O. (1989) p. 62
[77] These are also known as sill-beams or base-plates.
[78] Post-trench construction was a technique in which posts were set at intervals within a trench.

particularly convincing example of sill-beam construction use has been found in Britain until the coming of the Romans.[80] Any that has been inferred, such as at Skeleton Green,[81] Danebury and Crickley Hill[82] has been confined to regions of the south that had contact with the continent.[83] According to present knowledge the majority of the excavated Iron Age dwelling were stake built roundhouses.

Deep foundation trenches are rare in Colchester in the Claudian period as the natural sand, which has sound load bearing qualities, was not far below the surface.[84] In 15-35 Copthall Avenue, London, the timber ground-sills were set in very narrow shallow slots.[85] Some dwellings, such as at London Wall, had more involved foundations. In a first century building the wall underpinning consisted of a rectangular shallow trench that was lined by planks that were packed with rammed gravel on which the sill-beam rested.[86]

Stone structures need deeper foundations and these may obliterate or make it difficult to identify the traces of previous less substantial buildings.[87] At Culver Street, Colchester, Building 44 the masonry plinth was some 0.50-0.80m into the natural sand.[88] In Lime Street, London the foundations for a masonry wall, which was destroyed in the late Flavian period, consisted of piles and rammed chalk.[89] Masonry foundations could be constructed by shuttering, the process of which is similar to the method used in mud walling described below. The major contrast between the two was the length of time needed to let the former dry before the shutters were removed (Figure 25e). This was a process by which a mixture of stone, gravel, rubble and mortar was poured between two lines of vertical timber boards.[90] In the examples from Colchester they were set 0.6m to 0.85m apart. Once the required level had been achieved the mortar was tamped flat to

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[79] Hanson, W.S. (1982) p. 171
[80] Allen, T., Miles, D. & Palmer, S. (1984) p. 100
[81] Partridge, C. (1981) pp. 37-8; Reid, M.L. (1993) p. 58
[82] Allen, T., Miles, D. & Palmer, S. (1984) pp. 93-4
[83] Rodwell, W. (1978) p. 39
[84] Crummy, P. (1977) p. 71; (1984) p. 20
[85] Maloney, C. & de Moulins, D. (1990) p. 47
[86] Lees, D., Woodger, A. & Orton, C. (1989) p. 116
[87] de la Bédoyère, G. (1991) p. 17
[88] Crummy, P. (1992) p. 39
[89] Richardson, B. (1985) p. 49
[90] Crummy, P. (1977) p. 71

obtain a neat horizontal surface. Generally in Colchester each plinth was less then 0.05 to 0.08m below the natural sand and were in effect foundations rather than dwarf walls.[91]

ii) Wall Construction

Generally speaking there were two structural systems available, mass and frame construction. In its very simplest form frame construction consisted of posts placed directly into the ground.[92] This developed into a more sophisticated technique that involved sill-beams. Timber-framing or *opus craticium* was one of the most widely practised forms of mixed construction. The greatest advantage of this method of fabrication over mere posts was that it formed a steadfast and level platform to place a timber-framework. It considerably increased stability as well as the lateral strength of the wall against the possibility of localised subsidence. Another function of the sill-beam was to prevent local settlement of the wall mass. Clay walls have a low tensile strength and any local subsidence at the wall base will cause the wall to crack.[93] This improved method allowed the uprights to be set into the sill making these timbers less susceptible to rot as water will follow the grain of the sill-beam and not that of the studs.[94] The practice of placing the horizontal beams on dwarf walls, common from the second century onwards, insulated the sill-beam from the damp soil further increasing life span.[95]

A mortise, which is a rectangular aperture, was cut into the upper face of the sill-beam to receive the tenons of vertical posts. Tenon and mortise joints were used to ensure the rigidity of the union between the sill-beam and the uprights, and were the commonest form of joints used between two timbers meeting at right angles.[96] The mortising of timber structures for walls was a practice that dates back to the Neolithic period and one well established by the Iron Age and was not a new form of assembly known only to the Romans.[97]

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[91] Crummy, P. (1984) p. 20; (1988) p. 31
[92] The term post construction is used here to differentiate it from timber-frame work.
[93] Ashurst, J. & Ashurst, N. (1989) pp. 98 & 105
[94] West, T. (1971) p. 21; Drury, P.J. (1975) p. 165
[95] Atkinson, D. (1931) p. 129; Richmond, I.A. (1961) p. 24; Sheldon, H. (1974) p. 12; Hanson, W.S. (1982) p. 171
[96] Brown, R.J. (1986) p. 32; Harris, R. (1997) p. 13
[97] Fitchen, J. (1985) p. 143; Audouze, F. & Büchsenschütz, O. (1989) pp. 52-3; Davey, N. (1991) p. 40

There were two types of posts, wall-posts, which formed part of the main framework and these usually carried a tie-beam or wall-plate, and subsidiary posts known as studs. Examples of these studs *in situ* have survived from a second century warehouse in Old Courage Brewery at Southwark,[98] while in Pudding Lane a near complete principal post was found.[99] On the Cannon Street Station site not only have the timber base-plates survived but also the studs, wall-plates and tie-beams.[100] The Pudding Lane principal post survived almost in its entirety except for some loss at one end. It measured some 2.30m long, excluding the tenons. What makes this find so significant is that almost the complete length of a post has been found giving a clearer concept as to how high timber-framed walls were and their use within the wall. This find, and others, seems to give a very general height for timber-framed buildings of over two metres.[101]

A sturdier framework was ensured by a wall-plate and tie-beam that aligned and retained the upper parts of the wall-posts and studs, and the plate would then provide a base for roof rafters and gables. Although wall-beams would have stiffened the structural frame these joints would not have been very strong, and their function may have been to fasten the elements of the frame rather than to resist the stresses of racking and other movements. Halving joints were used, as in the ground-beams, for securing the wall-beams when they met at right angles. The dovetail joint was frequently used with tie-beams and this type of joint was also used in the Middle Neolithic.[102]

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[98] Dillion, J. (1989) pp. 229-31; Girardon, S. & Heathcote, J. (1989) p. 78; Dillon, J., Jackson, S. & Jones, H. (1991) p. 261; Brigham, T., Goodburn, D., Tyers, I. & Dillon, J. (1995) p. 29

[99] Brigham, T., Goodburn, D., Tyers, I. & Dillon, J. (1995) p. 29

[100] Goodburn, D. (1991) pp. 194 & 200

[101] Other studs do not survive to such a height but other measurements do. Building K on Newgate Street had square uprights measuring 0.04-0.06m thick and 0.1-0.18m wide set at 0.42-0.6m intervals a spacing that was dictated by the length of the blocks placed between the posts. On Watling Court in Building H a stud measured 0.15m long and was 0.10m wide. See Perring, D., Roskams, S. & Allen, P. (1991) pp. 72-3; In the Cannon Street building the framing timbers of this building were of a small character and were approximately 0.15-0.25m in width and the distance between the studs was 0.25m. See Dillon, J. (1989) p. 230; Goodburn, D. (1991) p. 190; In the Southwark warehouse the distance between posts were 0.88-0.9m. See Brigham, T., Goodburn, D., Tyers, I. & Dillon, J. (1995) pp. 13, 25; Building 2 of Leadenhall Court the stakes varied between 0.08-0.10m set some 0.5m apart. See Milne, G. & Wardle, A. (1996) p. 51; During period II at 15-35 Copthall Avenue the studs were placed 0.14-0.18m apart and their tenons measured 0.22-0.32m by 0.11m. Another baseplate found on the site the studs were placed 0.27-0.37m apart. See Maloney, C. & de Moulins, D. (1990) p. 65; At Verulamium, *insula* xiv in the Antonine period IID, the NW wall of Room 23 consisted of uprights measuring 0.20 by 0.15m. In the same period, wall 55/56 the uprights were 0.10m square and set at intervals of 0.56m. From *insula* xvii during period I the uprights measured 0.20 by 0.15m; See Frere, S.S. (1959) pp. 7-9

[102] Audouze, F. & Büchsenschütz, O. (1989) p. 51

Timber-framing meant that more skill was needed to evenly distribute the weight of the materials used. The joints were all important and must remain articulated regardless of the pressures that are exerted on them.[103] Timber-framing exploited the tensile strength of timber as the horizontal beams transferred the vertical stresses of the upper members along its length to the supporting posts until it was redistributed into the foundations. Doubling the length of the beam halved the compression that it could bear, while doubling the depth quadrupled its strength. As a result a number of intermediary vertical studs were placed along the axis of the sill- and wall-beams, which in turn were spanned by shorter horizontal members producing a lattice arrangement.[104] The corner posts are normally thicker than the studs as they are subject to the stresses of two walls and the top-plates meeting at right angles to each other.[105]

A chisel was used to cut vertical notches into the sides of each stud or wall-post. The notches were made as corresponding pairs down the sides of each panel to receive horizontal lath elements. At Culver Street, in Colchester, the wattle-and-daub surviving superstructure of Building 78 shows the well preserved impressions of wattles interwoven with horizontal wooden rails.[106] In the north-west wall of Room 23, in *insula* xiv, at Verulamium the longest sides of the main uprights were placed along the axis of the wall so that the sockets for the laths would not unduly weaken the uprights.[107] Similar methods of construction have been noted on the military buildings at Hod Hill[108] and Valkenburg in Holland.[109]

These laths would give further stability to the timber-frame and there would have been no need for diagonal braces. Medieval and modern timber-framing use diagonal braces that were subsidiary timbers that ran between the vertical and horizontal members of the frame work. Their use in Roman construction seems to be extremely rare and only one example has been found in an upper room at the Villa of Diomedes in Pompeii.[110]

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[103] Brown, R.J. (1986) p. 32
[104] Oliver, P. (1987) p. 92
[105] Adam, J-P. (1994) p. 122
[106] Crummy, P. (1992) p. 45
[107] Frere, S.S. (1972) p. 7
[108] Richmond, I. (1968) p. 76
[109] van Griffen, A.E. (1948a) Afb. 33, 38, 43; pl. 5
[110] Adam, J-P. (1994) p. 123 & fig. 284

Diagonal braces may have been used in Cannon Street, as indicated by the form of one timber element, but there is no indication of how it was articulated with the plate timbers.[111]

1) Wattle

Timber-framing provided support, but afforded no screening or weather protection for the shop-dwelling. The panel infill was put in place once the timber work had been completed. The materials used as an infill within the panels included stone, flint, brick, clay and wattles.[112]

The most significant evidence for the use of wattle construction comes from the horizons of destruction débris from the fires that many of the towns of Roman Britain suffered. The Boudiccan fires and subsequent fires have left behind well-defined burnt layers at London, Colchester and Verulamium that have preserved the imprint of wattle-and-daub buildings. During their destruction the walls had disintegrated leaving no standing sections of wattle-and-daub.[113] While the wooden members of the wall had been consumed by fire, the daub had baked into brick fragments bearing wattle impressions. More importantly they not only exhibit the weave and form of the wattle, but also ground-sills, horizontal members and vertical posts.[114]

Wattle-and-daub as a construction technique dates back to at least the Neolithic period.[115] Vitruvius believed that clay and wattles were one of the earliest materials used in construction.[116] In their simplest form wattles consisted of small flexible branches that were interwoven horizontally around and between irregular building uprights. This technique was used extensively in the Iron Age and was found in the stake-built round houses in Castell Henllys[117] and Crickley Hill.[118] Roman examples of this technique were discovered during the excavations of Leadenhall Court in Building 2,[119] and Buildings B

[111] Goodburn, D. (1991) p. 200
[112] Goodburn, D. (1991) p. 202
[113] Perring, D., Roskams, S. & Allen, P. (1991) p. 74
[114] Hope, W.H. (1902) p. 25; Frere, S.S. (1972) pp. 160-1
[115] Bryce, T. (1980) pp. 72-6; Coles, J.M., Caseldine, A.E. & Morgan, R.A. (1988) pp. 44-9; Coles, J.M. (1989) p. 24 fig. 18
[116] II.i.2-3
[117] Mytum, H. (1991) pp. 9-10
[118] Guilbert, G. (1981) p. 299
[119] Milne, G. & Wootton, P. (1990) p. 186; Milne, G. & Wardle, A. (1996) p. 51

and C in Newgate Street.[120] At Colchester this pattern was recognised in Balkerne Lane in Buildings 44-46.[121] The Verulamium Period IID, *insula* xiv, wall 23/24 was also built of clay packed against each side of what appears to be a framework of wattle hurdling woven in this fashion.[122] Sometimes this technique was made more complex by the addition of vertical and even diagonal rods such as in Building B, Newgate Street (figure 24a).[123]

By the end of the first century a more complex form of wattling had been introduced to Britain along with timber-framing, which consisted of vertically woven laths (Figure24b). In timber-framing the ends of the wattles could then be strained against the frame or inserted into specially cut grooves. In the case of the latter staves were prepared, having a pointed top to fit into the upper apertures and a chiselled bottom end to slide tightly into the groove.[124]

The main walls of period IID *insula* xiv, Verulamium consisted of squared posts evenly spaced at vertical and horizontal intervals, between which much thinner laths were keyed into sleeper beams below and forced alternately in front and behind the higher horizontal members.[125] An early mid-second century sill-beam on the 15-35 Copthall Avenue site, London, had two parallel grooves interconnecting the mortises along the length of the sill. Presumably they were used to fix the vertical rods in places, an assumption that is based on the fact that both were filled with clay and decayed wood.[126] This technique of wattling has been noticed in contexts, such as at Colchester Building viii in Lion Walk,[127] London's Watling Court and Borough High Street[128] and Valkenburg in Holland.[129]

[120] Perring, D., Roskams, S. & Allen, P. (1991) pp. 71, 82-3
[121] Crummy, P. (1984) pp. 21 & 33
[122] Frere, S.S. (1972) p. 6
[123] Perring, D., Roskams, S. & Allen, P. (1991) p. 76
[124] Harris, R. (1997) p. 20
[125] Frere, S.S. (1972) p. 6
[126] Maloney, C. & de Moulins, D. (1990) pp. 49, 65-6, fig. 72
[127] Crummy, P. (1984) p. 22
[128] Sheldon, H. (1978) p. 185
[129] van Griffen, A.E. (1948a) Afb. 33, 38, 43; Pl. 5

2) Daub

The technique of wattling created an almost continuous core of wood that was made weather resistant by a covering of clay daub.[130] The daub was applied to both sides of the wattling either by hand, trowel or float and was inserted well into all the spaces forming a screen.

Wattle-and-daub is always prone to movement especially when wet and contracting when dry but if well maintained and sheltered it will last indefinitely in moderate and sheltered conditions.[131] Although the daub is weak in tension, will crack and at times lose its key, the timber network will usually remain undamaged.[132] Vitruvius mentions that the timber elements of the wall take up the moisture of the daub and swell. When they dried they contracted causing further spaces in the wall surface. [133] To reduce the amount of cracking due to shrinkage it has been found that an application of daub to at least a thickness of about 12-30mm was required.[134] In Colchester the frame was encased with daub to a depth of 50mm by a float.[135] In London an average coating of 10-30mm was noted.[136] Any cracks that did appear were subsequently filled with daub.[137]

3) Mud-Brick

In other cases the infill did not utilise wattles but brick-earth or clay formed into unfired bricks know as *adobe* (Figure 24c). As a mode of construction it is recorded as far back as the sixth millennium B.C. in Jericho.[138] The manufacture of bricks, shaped and then dried by the sun, was traditional in the Mediterranean and seems always to have been known to the Italians.[139] The only case of its use in an Iron Age setting in north-western

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[130] Oliver, P. (1987) p. 94; Harding, D.W., Blake, I.M. & Reynolds, P.J. (1988) p. 103
[131] Wright, A. (1991) pp. 96-8, 101
[132] Ashurst, J. & Ashurst, N. (1989) p. 117
[133] II.viii.20
[134] This depth has been confirmed by both examples from traditional and historical vernacular architecture. Ashurst, J. & Ashurst, N. (1989) p. 120
[135] Crummy, P. (1984) p. 22
[136] Perring, D., Roskams, S. & Allen, P. (1991) p. 84
[137] Addy, A.O. (1905) p. 44; Wright, A. (1991) p. 101
[138] Davey, N. (1961) pp. 21-3
[139] Cassius Dio xxxix.62.2 when discussing the events of 54 B.C. speaks of a flood of the Tiber in which the houses because they were constructed of sun-dried brick became soaked and collapses. This shows that even at this stage sun-dried bricks were still a common form of construction. Anderson, J.C. (1997) p. 151;

Europe is at Heuneburg and this may have been through Italian influences.[140] As with daub the clay for bricks would have been gathered locally. This is reinforced by the discarded bricks found in the lower fill of the late first century quarry pit adjacent to Building H at G.P.O. Newgate Street.[141] It was formed and prepared in much the same fashion as daub and sometimes finely chopped straw was added to the mixture.[142] The addition of vegetable matter to the mud-bricks of Building 44 has been noted in Colchester.[143]

At it simplest level the compound could be formed into crude bricks by hand, such as those dated to A.D. 50-60 found on the site of the Roman Forum in London. Alternatively, the clay mixture could be manually rammed into a mould that created bricks of a regular size.[144]

At Leadenhall Court, London, buildings 10, 15, 18 utilised mud-brick made from brick-earth,[145] and the heavily truncated remains of several mud-brick structures existed at 62-4 Cornhill.[146] At Regis House, by the end of the first century the former masonry warehouses were entirely rebuilt in mud-brick.[147] This method closely follows patterns noted in Colchester and Lyons.[148] At Colchester's Lion Walk and Culver Street the use of blocks seems to have been used in buildings without timber studs laid on single or double ground plates. At Culver Street an external corner of the superstructure of one of the barracks survives to a height of 0.65m and was only made of sun-dried bricks.[149]

There seems to be an absence of this form of construction from the deposits of later periods. This may be due to the difficulty of distinguishing this method of construction from solid clay walling when the wall aged. In Watling Court, Building H, period iv, the continuation of a dried-brick wall became an apparent mass of solid brick-earth (Figure 25f).[150]

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[140] Audouze, F. & Büchsenschütz, O. (1989) p. 46
[141] Roskams, S. (1980) p. 405; Perring, D., Roskams, S. & Allen, P. (1991) p. 9
[142] Davey, N. (1961) p. 21; Wright, A. (1991) p. 25
[143] Crummy, P. (1984) p. 22
[144] Dethier, J. (1982) p. 8
[145] Milne, G. & Wootton, P. (1990) p. 183; Milne, G. & Wardle, A. (1996) p. 51
[146] Heathcote, J. (1989) p. 48
[147] Greenwood, P. & Maloney, C. (1996) p. 5; Brigham, T. & Watson, B. (1998) p. 46
[148] Desbats, A. (1981) pp. 55-81
[149] Crummy, P. (1984) p. 22; (1988) p. 33
[150] In the early excavations this building is known as Structure 8; Perring, D. (1981) p. 107; Perring, D., Roskams, S. & Allen, P. (1991) pp. 77-8

The use of mud-brick was widespread throughout the provinces but was not as extensive in Britain, although London and Colchester may have been an exception due to their proximity to the continent or even military influences in the case of Colchester.[151] Initial construction work involved timbers throughout and when they were replaced in the second century the same materials were utilised but on stone walls or clay foundations.[152]

4) Clay-walls

Mass walling can be done in a number of forms such as stone, tile or clay. The most basic of these was clay. There are two basic methods of building up mass clay walling in clods or with shutters.[153] In the first method, known as cob, earth was broken up, mixed with water and made into clods of clay, which were then built up into layers. Each 'lift' was allowed to settle before the next layer was applied so that the shrinkage cracks were distributed throughout the wall.[154] The walls consolidated by virtue of their own weight and by drying out.[155] In this technique the buildings have thick walls built straight off the ground.[156] When the wall was finished it could be given a mud plaster or washed down to produce a skin.[157]

The alternative technique was to place damp mud between two shutters. This technique is a semi-dry method know by the French name of *pisé de terre,* a name of Latin origin that was first used in Lyon in 1562. Pliny refers to a method he knew from Spain and Africa that he called *formoceau* where clay was moulded between a frame of boards.[158] The shutters were frameworks of timber that keep the clay material in position until it has set sufficiently to support its own weight.[159] These were traditionally placed at least 0.5m apart and the earth was placed between them and was compressed manually by heavy wooded hammers.[160] Further clay was then added, which was subsequently rammed, and

[151] The military structures of early Colchester used sun-dried brick. Crummy, P. (1984) pp. 22-3, 31; (1997) p. 46
[152] Webster, G. (1979) p. 285
[153] Audouze, F. & Büchsenschütz, O. (1989) p. 45
[154] Denyer, S. (1978) p. 93; Wright, A. (1991) p. 27
[155] Ashurst, J. & Ashurst, N. (1989) pp. 89 & 99
[156] Rutter, A.F. (1971) p.167; Green, H.J.M (1975) p. 201; Rodwell, W. (1978) p. 30
[157] Oliver, P. (1987) p. 81
[158] XXV.xi.8.
[159] Fowler, D. (1982) p. 129
[160] Ashurst, J. & Ashurst, N. (1989) p. 90; Mytum, H. (1991) p. 57

his process proceeded until the shutter was filled. Work continued in sections and as there was little drying time required the work could begin almost immediately (Figure 24d-e). Windows and doors could be created by inserting a wooden-frame into the wall and then building up the mud on either side and over the top of the frame.[161]

This method can be seen in a wall on Building K, period VII (A.D. 100-120), at Newgate Street. The configuration of the wall exhibited slight changes in composition, which indicate that it had not been constructed in pre-formed blocks but different layers of clay.[162] The truncated remains of two distinct 'lifts' have been noticed in a building from Area A on the 52-63 London Wall site in the Walbrook valley.[163] This technique can be found in the assembly of the Claudian Buildings I-VI at Lion Walk in Colchester.[164] A later second century wall at Verulamium has produced a wall that was cast in one piece by tamping clay between shuttering.[165] Interesting examples in Watling Court in Periods iv (A.D. 70/80-85/90) and v (A.D. 60-70/80) are Buildings C and H, of these the remains of building H are better preserved. Here the lowest course was made up of ten courses of tiles. This was capped by a further two courses of dried-bricks which was then sealed by solid brick-earth. As these two layers of different methods of brick-earth are clearly distinguishable from each other it is presumed that the upper courses were not formed into blocks. This is strengthened by evidence of the impressions of two squared uprights against one wall face that had been left behind by a shutter during construction.[166]

5) Plastering

Surface protection to the mud walls was added in the form of plastering. During the drying process daub would often contract and crack. These cracks were filled, and the whole wall was plastered with a usually finer and lighter material, similar to that used in the wall, for protection against weathering or to receive decoration (Figure 25d).[167]

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[161] Rutter, A.F. (1971) p.167; Wright, A. (1991) p. 27; MacDonald, F. & Doyle, P. (1997) p. 13
[162] Perring, D., Roskams, S. & Allen, P. (1991) p. 78
[163] Lees, D., Woodger, A., & Orton, C. (1989) p. 116
[164] Crummy, P. (1977) p. 71
[165] Williams, J.H. (1971) p. 176; Frere, S.S. (1983) p. 161
[166] Dyson, T. & Schofield, J. (1981) p. 34; Perring, D., Roskams, S. & Allen, P. (1991) p. 79
[167] Bidwell, P. (1996) p. 19

It is as yet unclear to what extent timber-framing was decorated. The timbers may have been left exposed as in medieval buildings to form a decorative pattern.[168] On the weight of Italian examples the plaster probably did not lie flush with the surface timbers but completely covered the uprights and framing.[169] This practice of rendering over the timber-frame can be seen in Herculaneum and Pompeii.[170] In the *Casa del Menandro* in Pompeii the remains of the plastering are still visible on the walls.[171] Plastering the whole wall would prevent water entering through the gaps around the edges of the panels.[172]

Clay plastering had the advantage that it was inexpensive, easily available if large quantities were required and could be quickly renewed.[173] The ideal surface treatment simply produced a crust above the surface of the wall. This should be deep enough to have a consistency that does not crack and a depth of up to 20mm is normally sufficient.[174] The successive plaster layers on the Claudian building on the Roman Forum site were about 13mm in depth.[175]

Replastering could be quite frequent and the building on the London Forum site had four layers of plaster, in a phase that could have lasted only about ten years, were found.[176] In the South-building on Fenchurch Street a semi-basement was re-plastered and painted no less than three times within five or six years.[177] At Watling Court, Building K shows signs of repair to the external plaster work before the Hadrianic fire.[178] Much of the replastering was presumably related to the general upkeep of the premises but in some case the replastering could indicate a change in ownership or even use of the *tabernae*.

Plastering increased a wall's durability and reduced the flammability of the timber members. It also allowed the clay to become firmly based in its own right and less liable to pull or sag.[179] Aesthetically it created a smooth finish and any rough contours would be

[168] There are of course exceptions to this rule, particularly in East Anglia. Harris, R. (1997) p. 21.
[169] West, T. (1971) p. 120; Perring, D., Roskams, S. & Allen, P. (1991) p. 85; Adam, J-P. (1994) pp. 217-8
[170] For an example in Pompeii I.10.8 on the north wall of room 6. See Ling, R. (1997) p. 337 plate 105
[171] Ling, R. (1997) p. 185 pl. 105 & p. 186 fn. 35
[172] Harris, R. (1997) p. 23
[173] Torraca, G., Chiari, G. & Gullini, G. (1972) pp. 264-5
[174] Torraca, G., Chiari, G. & Gullini, G. (1972) pp. 271-9, 286; McIntosh, R.J. (1974) p. 163
[175] Philp., B.J. (1977) p. 15
[176] Philip, B.J. (1977) p. 15; Davey, N. & Ling, R. (1982) p. 56
[177] Merrifield, R. (1983) p. 40
[178] Perring, D., Roskams, S. & Allen, P. (1991) p. 41 figs. 37-8
[179] Richmond, I.A. (1961) pp. 22-3

reduced or lost as successive layers were added in maintenance.[180] Internal plastering served the dual purpose of providing a level surface to the wall and a suitable background to receive a decorative finish.[181]

The susceptibility of clay plastering weathering meant that it had to be frequently maintained. In order to protect it the wall was frequently rendered with a paint treatment that could also acted as a decorative finish.[182] After the great fire of London in 1212, all cook shops, bakeries and breweries were ordered by the civic authorities to be whitewashed and plastered inside and out as a protection against fire.[183] Some of the plastering and decorative finishes, such as in the warehouses at Regis house, could be done to a fairly high standard, despite their commercial use.[184] The external walls in the majority of cases seem to have been painted in a white or cream wash. An example of external lime-wash rendering was recorded on London's Leadenhall Building 12.[185]

6) Masonry

The most effective way to protect the most vulnerable lower parts of clay walls was to raise them upon a stone plinth.[186] Excavations on the *via Sacra*, in Rome, have revealed traces of houses with stone footings and mud-brick walls strengthened with timbers dating back to the sixth-century B.C.[187] Vitruvius mentions that wattle-and-daub walls should be raised above the foundations so that it does not come into contact with the pavement.[188] This increased expense but it gave the wall a longer useful life (Figure 25b).

The upper course of a flint and mortar dwarf wall at Silchester, House xxxii.1 contains a slot approximately 0.30m wide that was probably used to house a timber sill-beam.[189] In other cases the upper course merely consisted of a tile-capped wall that could have carried a mud wall as opposed to a timber-frame work. An example from Caistor has

[180] Ragsdale, L.A. & Raynham, E.A. (1964) p. 155
[181] Ragsdale, L.A. & Raynham, E.A. (1964) p. 242
[182] Ragsdale, L.A. & Raynham, E.A. (1964) p. 226
[183] Addy, A.O. (1905) p. 126
[184] Brighham, T. & Watson, B. (1996) pp. 63-4 Brigham, T. & Watson, B. (1998) p. 46
[185] Milne, G. & Wootton, P. (1990) p. 186; (1996) pp. 53 & 57
[186] Dethier, J. (1982) p. 8; Ashurst, J. & Ashurst, N. (1989) p. 87; Wright, A. (1991) p. 16; MacDonald, F. & Doyle, P. (1997) p. 12
[187] Meiggs, R. (1982) p. 221
[188] II.viii.20
[189] Hope, W.H. (1903) p. 417 & pl. xxx

such an arrangement but a wattle-and-daub partition was found *in situ* which gave evidence of a 0.15m sill-beam.[190] The dwarf wall of Structure A, Watling Court London, consisted of ragstone and mortar bonding.[191] From the available evidence the impression given is that the timber-frame did not always penetrate into the dwarf wall to stabilise the superstructure, although a means of securing and holding the framework into place may have been lost. Often these walls do not survive to a sufficient height to indicate the presence of a timber superstructure, but it the latter surmised to have been employed because the wall foundations appear to be far too insubstantial to carry a masonry wall to its full height. It is only when sufficient daub is found in association with such stone walls that any confident assumption can be made.[192]

Whole masonry walls could be constructed by shuttering from the foundations up as described for clay building (see Section 4). At Fishstreet Hill, in London, a wall belonging to Building A was built of flint and ragstone rather than tile and was constructed within a wooden-frame of shuttering.[193] The walls of Building 3 on Southwark Street were built on a foundation wall 1m deep that contained a compact layer of flint, ragstone and chalk over a layer of tightly packed pieces of chalk.[194] 175-177 Borough High Street, Southwark, the wall was made up of clay mixed with sand and lumps of mortar and burnt clay.[195] In Knightrider Street it would seem that a ragstone and mortar wall was constructed in this fashion as the smooth finish of the wall face bore the impressions of the timber planks and divisions between them.[196] During the construction of the late first century Building A on the Fish Hill Street site a compound of ragstone and flint was used.[197]

Generally in Roman building the wall itself was formed by the actual surface dressing of the wall that was carried out in either stone or brick. The face of the stones was squared while the back was narrowed off so as to be firmly keyed into the core.[198] Any gaps were filled in with rubble and concrete that was left to harden. The primary role of the wall facing was to assist in the construction process (Figure 25f). The walls of Roman

[190] Atkinson, D. (1929) pp. 34-5; Atkinson, D. (1931) pp. 113-20
[191] Perring, D. (1982) p. 106
[192] Hanson, W.S. (1982) p. 171
[193] Bateman, N. (1986) p. 238 & fig. 6
[194] Beard, D. & Cowan, C. (1988) p. 377
[195] Schaaf, L. (1976) p. 5
[196] Norman, P. & Reader, F. (1906) pp. 219-20
[197] Bateman, N. (1986) p. 238 & fig 6

Britain, in comparison to Italian examples, were weak and are described by Ling as walls of 'mortared rubble'.[199] On many sites, the small quantities of débris seem insufficient to suggest a stone superstructure. In these cases the footings supported a timber-frame, mud-brick, *pisé* or cob wall.[200]

Most later Roman buildings in London are believed to have been wholly constructed in stone (Figure 25c). This is based on the evidence of more substantial foundations then those that are presumed to have been dwarf walls and also of the above ground level survival of stone and the absence of daub or timber.[201] As a rule the sites of Roman Britain are not so encumbered with fallen masonry, as might have been expected had the walls been fully constructed in stone, although this may be a consequence of stone robbing.[202] There have been such finds at Meonstoke,[203] Stanwick,[204] Carsington and Batten Hanger[205] where the whole sides of two storey buildings have survived, indicating that the elevations of these buildings were of masonry construction. To date there have been no such finds in any urban settlement.

7) Fired-Brick

Firing or baking clay-bricks can solve many of the problems of mud. The great advantages of fired-brick or tile over stone is that units could be made to predetermined sizes and it is easier to construct walls that are in line and level. Precise corners can be formed and by flat striking of the joints a small enough surface can be created to take an economically thin layer of plaster in comparison to that needed for undressed stonework. The major disadvantage of fired-bricks is that they are more expensive to produce than sun-dried bricks. The baking process needed an oven temperature of between 900° and 1100°C and this would have consumed vast amounts of fuel.[206]

There was no tradition of brick making, whether dried or fired, in Britain before the middle of the first century. This would indicate that this was an introduced rather than an

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[198] Ward, J. (1911) pp. 255-6
[199] Ling, R. (1995) pp. 23-6
[200] Blagg, T.F.C. (1990) p. 38; Smith, J.T. (1982) p. 8
[201] Perring, D., Roskams, S. & Allen, P. (1991) p. 80
[202] Ward, J. (1911) p. 259
[203] King, A.C. & Potter, T.W. (1990) pp. 195-204
[204] Neal, D.S. (1982) pp. 153-71
[205] Ling, R. (1992) pp. 233-5

indigenous industry.[207] The physical change during the firing process means that the brick becomes like stone and is no longer malleable and cannot be reconstituted. However, they have a greater durability and are relatively imperviousness to the rigours of the climate if a suitable bonding agent is used. Their greatest advantage is their fire-resistance that can withstand considerable and frequent changes in temperatures that would disintegrate many stones. As a stringcourse, tile helped bind a rubble wall together, especially when the cement was green. These advantages would have been important in baths, public buildings and hypocaust construction although it was not a general requirement in domestic building. Any problems or imperfections in the wall surface could be masked in plaster.[208] This greater durability meant that fired-bricks are very appealing to those that were willing to purchase them.[209] However, while walls built of bricks were frequent in Rome they are rare in Roman Britain.[210] The most extensive use of tiles in Britain was for roof construction.[211]

iii) Roofing

There is very little archaeological evidence to hint at the type of roofing adopted in Roman Britain. This is made even more difficult as the building remains do not survive to the top part of walls. The roof provided the final weather protection envelope to the activities carried on within the shop-dwelling. It can be assumed that the frame was composed of timber and was of simple construction (Figure 26). The discovery of burnt timbers and nails found at the base of the destruction débris and above the floor of Building A at Watling Court, London, suggests that these were part of the collapsed roof structure.[212] The oldest form of roofing is thought to be a gable roof. According to Meiggs 'the standard system of roofing was the tie-beam trusses'.[213] Another method was posts that rested on a

[206] Dethier, J. (1982) p. 14
[207] Darvill, T. & McWhirr, A. (1984) p. 256
[208] Webster, G. (1979) pp. 285-7
[209] Oliver, P. (1987) p. 84
[210] Ward, J. (1911) p. 257
[211] Webster, G. (1979) p. 291
[212] Perring, D., Roskams, S. & Allen, P. (1991) p. 29
[213] Meiggs, R. (1982) pp. 226 & 242

roof ridge that in turn rested on the sidewalls.[214] If the roof span is moderate there is little need for horizontal beams.[215] The weight of the roof was then transferred to the foundations by means of the walls. Whatever method used the roof had to be stabilised and sit on the walls neither pushing outwards nor forcing them inwards.[216] The roof should be as light as possible and this will keep the dead weight of the structure to a minimum.[217] The object of the roof-frame was to act as the support for a layer of some material that would shelter the building.[218]

The rafters could be covered in straw or some other organic material of which nothing will survive. This produced a light roof that was particularly suitable for poor walling materials such as mud or chalk.[219] A thatched roof was light and the rafters could be more widely spaced than for a tiled roof.[220] Its use can be presumed during excavation when there is an absence of broken tiles in the surrounding area. Tiles were laid flat over the roof in regular courses, overlapping each other, and followed the pitch of the roof to prevent water entering the building.[221] Structurally wattle-and-daub walls are strong and could support a tiled roof. Building 8 at Lion Walk, Colchester was associated with large quantities of broken tiles in its destruction débris and must have had a tiled roof.[222] A roof with a minimum pitch of 45° seems to have been the most effective for both thatch and tile roofs so that the rain will easily run off.[223] A greater angle increases the area of the roof and therefore the amount of material to cover the surface.[224] Alternately a low pitch would produce an obtuse angle at the ridge and cause sagging.[225]

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[214] Adam, J-P. (1994) pp. 206-7
[215] Crawford, J.S. (1990) p. 9
[216] Harding, D.W., Blake, I.M. & Reynolds, P.J. (1988) p. 95
[217] Rapoport, A. (1969) p. 105
[218] Salzman, L.F. (1997) p. 223
[219] Brumskill, R.W. (1978) p. 84
[220] West, T. (1971) p. 113
[221] Adam, J-P. (1994) pp. 214-5
[222] Crummy, P. (1984) p. 22
[223] Reynolds, P. J. (1979) p. 33; Reynolds, P. J. (1982) p. 180; Harding, D.W., Blake, I.M. & Reynolds, P.J. (1988) p. 95
[224] Brumskill, R.W. (1978) pp. 84 & 90
[225] Quiney, A. (1995) p. 58

Discussion

From the very birth of towns in Roman Britain there would seem to have been an evolution in building techniques, utilising native materials and adapting local methods. The very first *tabernae* were simply built, when compared to the more ostentatious civic structures. Vitruvius, while discussing building materials makes apparent his utter contempt for wattle-and-daub construction.

> 'I could wish that walls of wattlework had not been invented. For however advantageous they are in speed of erection and for increase of space, to that extent are they a public misfortune, because they are like torches ready for kindling'.[226]

While Vitruvius makes the reader aware of his opinion, he does indicate some of the factors that led to its use, but considers wattle-and-daub only to be an expedient solution to a lack of time, finance and space. Despite its advantages, wattle-and-daub also created many problems, not least of which was its great susceptibility to fire. This is not only clear from Vitruvius but also from the clear evidence of fire that has been left in the towns of Roman Britain, such as after the Boudiccan revolt. The other disadvantage was its limited durability and its tendency to weathering.[227] This adoption of wattle-and-daub in Britain was presumably in response to the rapid urban expansion after the Roman conquest. A comparatively sudden and high level of demand for constructional material could be easily satisfied in this manner before the utilisation of stone. It is clear that wattle-and-daub was immensely important during most of the first century, when long term uncertainty, a common feature of any new settlement even up to the present day, would have kept investment in building to a minimum. In other words, what were needed were inexpensive utilitarian buildings.[228] It was these factors, and not any consideration of how long the site would be occupied that influenced the building materials to be utilised.

There seems then to have been a progressive development from post-built walls to timber-frames filled with wattle-and-daub. Reconstructions as well as comparisons to modern traditional Irish and English architecture attest to the greater solidity, economy and

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[226] II.viii.20
[227] Wright, A. (1991) p. 16
[228] Wacher, J.S. (1966) p. 79; Hanson, W.S. (1982) p. 168

insulation properties of this form of construction especially when it is placed on an insulating dwarf wall.[229] In other cases, instead of wattle, mud-brick evolved as an infill for the timber-frames.

Apparently mass walling in clay was a method of construction that was unknown in pre-Roman Britain. Earth, as a building material is an extremely versatile fabric. It is an extremely malleable and flexible substance and relatively unskilled labour was required to build a wall. Less heating and cooling is required in earth dwellings and this ensured a substantial reduction in heat loss and a general feeling of 'thermal comfort'.[230] Not only do they have excellent thermal properties but also good sound insulation characteristics, an important factor in a workshop.[231] Despite its lower life span than stone this could be significantly lengthened with constant and particular maintenance.[232]

From the second century there seems to have been a general adoption of stone. To what extent these walls were solely constructed in stone is unknown. The use of stone in combination with mud or timber improved living conditions by supporting posts and protecting wall bases from damp.[233] The apparent absence of Roman timbers from this period has been explained by a greatly diminished supply of lumber due to the large quantities of timber utilised during the first and second centuries.[234] Despite the fact that timbers may no longer have been used in wall composition, wood was still an essential and major component of construction especially in the roof superstructure.[235] Cremations consume great quantities of wood and this custom continues into the third century in Britain.[236] Most of the cremations show that they were well cremated emphasising that fuel

[229] Audouze, F. & Büchsenschütz, O. (1989) p. 45
[230] Dethier, J. (1982) pp. 15 & 122
[231] Wright, A. (1991) p. 15; MacDonald, F. & Doyle, P. (1997) pp. 7-20
[232] Torraca, G., Chiari, G. & Gullini, G. (1972) pp. 282-3
[233] Audouze, F. & Büchsenschütz, O. (1989) p. 47
[234] Williams, T. (1993) p. 99
[235] Meiggs, R. (1982) p. 238
[236] Cremations clearly take some time and effort and large quantities of wood were also required. McKinley, J.I. (1989) p. 73. The normal allowance of wood fuel for the field cremations of Indian soldiers during the First World War was over a ton. Mears, J.D. (1937) p. 272 fn. 1; Davidson, J.M. (1952) p. 65; Breeze, D.J. & Graham Ritchie, J.N. (1980) p. 84

was not skimped upon.[237] On a more mundane level, wood was needed for fuel for baking, tanning, metalworking and pottery and general heating.[238]

Possibly the main impetus that contributed to the construction of stone buildings must have been the fire hazard posed by timber and thatch. Stone buildings meant that heating systems could be safely used further reducing the risk of fire. Fierce drying, such as those associated with local heat sources found in workshops can be particularly detrimental to mud walls and cause local surface failures.[239] Another reason was its greater durability, clearly shown in Roman London by the discovery of second century stone structures positioned along the waterfront, which apparently continued in use well into the fourth century.[240]

While the move to masonry construction can be seen as an expression of increased affluence, and its use in a town that does not possess a local supply of stone would have represented a great investment on the part of the house owners, the importance of political and economic factors cannot be over stressed.[241] The apparent reluctance to adopt stone may have been because quarries were under imperial control, and that civic schemes were given priority over any private concerns. Once the demand for public building projects had been satisfied the quarries could be utilised in the construction of *tabernae* and dwellings before the onset of major defensive schemes.[242] Furthermore, the artisans that had been involved in these public works would now be available to work on private building enterprises.[243]

Excavations at Cirencester have shown that this was not widespread as the row of shops opposite the market had been rebuilt at intervals.[244] This meant that for some time the street was made up of an assortment of both stone and wooden buildings. It was not until the fourth century that all the buildings were constructed in stone.[245] Buildings

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[237] Pers. Comm. Pearce, R.J.H. (Nov. 1998) <john.pearce@literae-humaniories.ac.uk> Centre for the study of ancient documents. Wells, C. (1981) p. 290 Consistently found well cremated bones in three cemeteries at Braughing.
[238] Meiggs, R. (1982) p. 237
[239] Ashurst, J. & Ashurst, N. (1989) p. 99
[240] Milne. G. (1985) pp. 127-41
[241] Perring, D. (1987) p. 152
[242] Wacher, J.S. (1995) p. 207
[243] Williams J.H. (1971) p. 168; Perring, D. (1987) pp. 150-2
[244] Wacher, J.S. (1962) p. 11
[245] Wacher, J.S. (1995) p. 66

constructed of such durable materials, or having stone foundations beneath their timber-frames, would have formed relative points of permanence within the more rapidly changing surroundings formed by timber buildings. The erection of permanent buildings for the primary purpose of retail trade was more common in the larger towns from the second century onwards but the small towns eventually followed them.

From a very general over view of the construction techniques of Roman Britain there would seem to be a progressive development of building methods over time. This is an overly simplified characterisation of the situation, as all the structural types of buildings and materials would have been available to who ever was willing to pay. There would always have remained at the lower end of the social scale humbler dwellings of a commercial nature.[246] Fires and instability were major restraints on investments and the development of capital. This especially applies to those social groups whose savings and livelihoods are invested in their dwelling that could be wiped out by a single disaster.[247] The buildings of Leadenhall Court show evidence of decline and eventual site clearance in operation before the expansion of the civic centre.[248] At the G.P.O. and Watling Court site the Flavian buildings survived until the fire of A.D. 125 and on the latter site the buildings were replaced by structures of a poorer standard. A similar occurrence has been observed at Milk Street.[249] Therefore the relative status of each site varied widely.

Houses are a social phenomenon and changes to the building indicate possible changes in the manner by which people used their houses and engaged in the business of living together as a community.[250] Changes in architectural fashion would have been accompanied by changes in the social composition of the population of Britain from native and Roman to Romano-British. If this is the case then the type of materials adopted and the form of assembly of the early *tabernae* reflect not only the social but also the economic standing of the individual within their immediate environment and that of the wider province within the Empire.

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[246] Wacher, J.S. (1978) p. 90
[247] Casey, P.J. (1985) p. 44
[248] Milne, G. & Wootton, P. (1990) pp. 184-5; Milne, G. & Wardle, A. (1996) p. 53
[249] Dyson, T. & Schofield, J. (1981) p. 35
[250] Faroghi, S. (1987) p. 12

iv) The Building of Roman Britain

After the Roman conquest construction materials, and basic building techniques remained substantially as they had been before, except for the opening of new quarries. The elements and knowledge needed for this building evolution to take place in Britain were already available during the Iron Age. Right up to the conquest, and in places beyond, the use of earth-fast posts remained the most common building technique. It was more of an evolution of building techniques, with a 'jump start' coinciding with the arrival of the Romans, rather than a revolution. A similar pattern and evolution to this has been noted in north-western Europe.[251] Many architectural elements used after the conquest can be paralleled in Gaul and Italy and this may indicate the presence of a sizeable immigrant population.[252] Presumably the development of towns saw the assimilation of Roman architectural ideas among a largely native population influenced by settlers from the continent. This was not just matter of cultural assimilation but also one of building technology and materials.[253] The introduction of this new technology was of importance beyond the strictly technical sphere. The extra stability of framed-buildings over earth-fast structures enabled the frame to be held off the ground on masonry walls and resist rot. Buildings now had the potential to last for several generations and could be inherited along with the land they stood on. The technology of the timber-frame allowed for the expansion of building units to take into account changes in circumstances, such as more functions within the domestic complex or more occupants.[254] Woodland resources could be used more economically as timbers did not need to be replaced as often.[255]

When Britain became part of the Roman Empire it experienced an architectural transformation. Lacking a monumental architectural tradition similar to that of Mediterranean Europe, the first two generations of Britons saw their surroundings transformed with buildings that had no local precedent, with the construction of towns with

[251] Audouze, F. & Büchsenschütz, O. (1989) pp. 55 & 62
[252] Perring, D. (1995) p. 98
[253] Blagg, T.F.C. (1990) p. 38
[254] Schofield, J. & Vince, A. (1994) p. 89
[255] Goodburn, D.M. (1997) p. 256

basilicae, *fora*, bathhouses, amphitheatres, theatres and rectilinear buildings made of dressed stone and brick.[256]

During the initial foundation of Roman Britain there must have been a movement of the indigenous population as well as an influx of immigrants from continental Europe. Perhaps Britain learnt from the recent planning and building experiences of north-western Europe, as Gaul and Spain may have drawn upon the experiences of their northern Italian neighbours.[257] To carry on the logic of Ward-Perkins, this is not to say that the architecture of Roman Britain was the reflection and extension of that of Rome. In some respects it was, as the building types were presumably first developed in the capital. In Britain, as in Gaul, there was suddenly the creation of an urban civilisation of a Mediterranean type amongst a people who lacked this experience of city life. The social and political background was not there and the architecture of the new province came to acquire a character that was unknown before the settlement.[258] It was from Gaul, if anywhere, that Britain learnt how to be Roman.

v) The Role of the Roman Army

Evidence for the organisation of building is not very plentiful and little is know concerning how the ordinary town dwellers built their houses and *tabernae*. Studies such as Frere have given some attention to the role of the army in the building of the first houses.[259] At the time of the Roman conquest Britain lacked an architectural tradition comparable to the rest of Roman Europe. The result has been that the army has been given credit for any building of consequence. This has even been taken to the level of executing building projects on behalf of the civilian population.[260] It seems that the early civilian buildings followed, at least in some respects, the plans of the legionary barrack blocks that had preceded them as at Gloucester, or possibly inherited intact from the military as buildings in Colchester. This would have allowed for fast and inexpensive civilian settlement. The direct re-utilisation of elements of the antecedent military establishments

[256] Blagg, T.F.C. (1985) p. 65
[257] Ward-Perkins, J.B. (1970) pp. 18-9
[258] Ward-Perkins, J.B. (1970) p. 5
[259] Frere, S.S. (1972) pp. 10-1
[260] Liversidge, J. (1973) p. 34; Frere, S.S. (1974) p. 274; Blagg, T.F.C. (1984) p. 249

of these *coloniae* indicate the existence of veteran settlers but do not demonstrate that the military was involved in widespread construction for the civilian population.[261]

The governor may have assisted the settlers of these new towns by lending out troops as builders and labourers. However, it seems unlikely that it was feasible for the Roman Army to be utilised in the construction of towns, when they were involved in further conquest and consolidation in Wales and Northern Britain. During the process of annexation of conquered regions the army was heavily engaged in construction of its own account.[262] The legions were constructing their own buildings in stone before a similar programme of urban building had even started. Military buildings of stone are known from Exeter[263] and Usk.[264] Furthermore, in York, Caerleon, Chester and Inchtuthil they were laying out and constructing fortresses as well as forts and roads.[265] The army would have been equally in need of experienced builders and masons. Based on a study of masonry by Blagg there seems to be a distinction between military and civilian sites.[266] Assistance in the erection of monumental public buildings in the early *civitas* capitals of Roman Britain by the army seems unlikely and it would follow from this that they were unlikely to have been involved in the building of any private domiciles.[267] The use of any military personnel as part of a civilian building programme would have been a huge commitment in essential manpower.[268]

While an approximate size of the army in Britain has been calculated there is no indication for the size of the civilian population that moved into Britain from elsewhere in the empire in the years that followed the conquest. The Roman army by its nature was organised for large-scale operations. The native Britons were thought to be incapable of such collective enterprises but the earthwork defences round the later Iron Age settlements at Colchester and Chichester would seem to refute this.[269] The planning and construction of individual *tabernae* and private buildings could be constructed by a limited number of people. An examination of the actual buildings themselves shows they varied considerably

[261] Perring, D. (1987) p. 147
[262] Blagg, T.F.C. (1984) p. 251
[263] Bidwell, P. (1979) pp. 22-66, 136-46; Blagg, T.F.C. (1990) pp. 37
[264] Nash-Williams, V.E. (1969) p. 118; Manning, W.H. (1981) pp. 24-39
[265] Blagg, T.F.C. (1979) pp. 10-63; (1980) pp. 29-31
[266] Blagg, T.F.C. (1984) p. 254
[267] Blagg, T.F.C. (1980) pp. 28-40
[268] Blagg, T.F.C. (1984) p. 249

in construction, wall thickness and the overall size of the structure. In Watling Court the buildings varied considerably in construction, although they were all built of mud-brick or *pisé*.[270] A similar occurrence has been noted at Toppings Wharf[271] and Chelmsford.[272] The buildings of Leadenhall, although they were of the standard strip-building type, were different in techniques of construction.[273] Occasionally, different methods were found in the same structure.[274] If the legions were involved in such a building programme a far greater uniformity would be expected between buildings. Instead the buildings reflect an individuality that an army with other priorities could not cater for. Furthermore, the singularity and distinctiveness of these dwellings would have been alien to the military mind and suggest piecemeal construction.

There seems to be a restricted range of building types on the majority of sites, beyond the everyday domestic and *taberna* accommodation during the initial foundation of Roman Britain. In particular the relative scarcity of any buildings of more sophisticated design and size, make it clear that buildings of simple design predominated on the majority of sites.[275] This would suggest that these were individual holdings and that the buildings were either constructed by the owners themselves in a self-help fashion, or were contracted to, and executed by different individuals, rather then any centrally controlled civic or imperial project. In fact overall town planning seems to be lacking in towns, other than the preliminary laying out of street patterns and services such as bath buildings. These implications make it appear probable that many people, particularly if they were of low social means, constructed their own homes, perhaps with the help of a few neighbours or relatives.[276] There was no single integrated housing scheme and housing was a private concern that was determined by need and the ability to pay.

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[269] Blagg, T.F.C. (1984) p. 250
[270] Dyson, T. & Schofield, J. (1981) p. 34
[271] Sheldon, H. (1974) p. 12
[272] Drury, P.J. (1975) p. 165
[273] Milne, G. & Wootton, P. (1990) p. 185
[274] Milne, G. & Wardle, A. (1996) p. 51
[275] Burnham, B.C. (1995) p. 9
[276] Faroghi, S. (1987) p. 116

vi) The Use of Self-help Housing

Typically builders will work up to the technological limits at their disposal.[277] Vernacular architecture will be that designed by an amateur, probably the occupier of the intended building. Construction will be carried out without any training in design, but will be guided by a series of conventions build up in the locality, paying little attention to what may have been fashionable. The function of the building will be the dominant factor; aesthetic considerations will be minimal although they will present to some small degree.[278] It is a relatively new concept that people should not build their own houses.[279]

When discussing houses built of wattle-and-daub and mud in Wexford the Irish Farmers' Journal in 1814 stated that 'every man is capable of erecting a house for himself, compact and perpendicular'.[280] In the modern African village of Hani everyone in the village was familiar with timber constructional techniques, and individuals, with the help of neighbours, friends and family would have constructed their own homes. This is a common practice in other parts of the third world.[281]

Learning to build was part of the process of becoming a fully participating member of society. All members of the community are expected to have the knowledge and the dexterity to be able to construct their own dwellings.[282] These new settlements in Roman Britain would have contained complements of skilled and even professional labour.[283] If everyone helped each other build, a substantial proportion of the residents would gain knowledge of building, and this may have been how new and complex building practice and techniques were introduced and disseminated.[284] Most, if not all, houses in prehistoric Britain were probably designed and built by those who lived in them.[285] It would be surprising if this custom did not continue into the Roman period.

The establishment of self-help housing would have had a number of advantages for the early development of the province of Britain. It would have helped unite the new urban

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[277] Rapoport, A. (1969) p. 105
[278] Brumskill, R.W. (1978) pp. 25-6
[279] Ward, P.M. (1982) p. 56
[280] MacDonald, F. & Doyle, P. (1997) p. 14
[281] Gebremedhin, N. (1971) pp. 114-6; Ward, P.M. (1982) p. 159; O'Conner, A. (1983) p. 148
[282] Oliver, P. (1987) pp. 69-70
[283] Gilbert, A. & Gugler, J. (1982) p. 88
[284] Rapoport, A. (1969) p. 107; Needham, B. (1977) p. 117; Denyer, S. (1978) p. 92; Ward, P.M. (1982) p. 159

community for the process of social organisation. Both the indigenous and immigrant population would have had to work together forging friendships and exchanging ideas.[286] The ideological effect of the promotion of self-help would have been to increase the sense of ownership of material assets, personal independence and 'autonomy' at a time of instability. The intention may have been for early stabilisation during a difficult period, and to channel those people most affected and politically most discontented into several years of intensive and busy work.[287] Generally, self-help housing created and increased solidarity in a recently settled community and this could only benefit the continual 'romanization' of Britain. Confronted by an urgent need to build on a scale unprecedented at the time in Britain self-help housing would seem to have been the ideal if not the only practical solution.

Summary

After the Roman conquest building materials and techniques remained substantially as they had been. The Romans seem to have operated through the existing social system and used local building techniques rather than imposing new ones. The Romans were aware of the limitations of the new province as they had already experienced these in Italy many generations ago and more recently during the consolidation of Gaul. Naturally the Romano-British builders would have been affected by regional factors, but it is wrong to see them as being strikingly different from their continental counterparts.

There was clearly an evolution of building types that reflected the growing confidence in urban life and also prosperity. *Tabernae* adopted more complex structural techniques, that were at first unfamiliar to the native Britons, and invested in more solid buildings. The army has been given credit for much of the initial urban development. However, the army would have been heavily occupied campaigning in the north of England and Wales. They were also involved with a building scheme of their own and it is unlikely that the army would have had surplus manpower during this period. It more then likely that

[285] Reid, M.L. (1993) p. 5
[286] Ward, P.M. (1982) p. 241
[287] Ward, P.M. (1982) pp. 36-7, 51

the various construction patterns found in buildings reflects civilian rather military construction. Most districts of the Roman empire were characterised by local self-sufficiency and it would seem surprising if this were not in construction.

The materials used in the early *tabernae* and buildings were local and the structural methods adopted were not so technologically advanced that they would have been too complex for the native Britons to learn. Most Iron Age dwelling were probably erected by the occupants themselves, with the assistance of family, friends and neighbours, and it would be strange if this custom did not continue into the Roman period.[288] These new urban centres must have attracted immigrants from other parts of the empire. The practice of self-help housing would have greatly assisted the dissemination and circulation of new ideas and technologies. This would explain the comparatively rapid romanization of some areas of Britain.

Self-help housing would seem evident from the variety of constructional methods found in close proximity to each other. Even though the buildings adopted similar plans they vary in size, layout, wall thickness and even decoration and do not express the unity of composition that would be expected in a civic building programme. Instead they express a high degree of distinctiveness and individuality and were probably built by the individuals themselves, at least initially. The development of *tabernae* and housing in Britain showed an understanding of, as well as an aspiration towards, Roman architecture and design the adoption of which must have been a conscious acceptance of Roman values.

[288] Reynolds, P.J. (1979) pp. 34-5

Chapter III

Taberna plans

One of the most important matters to be explored is the manner in which the *taberna*-houses that lined the streets, once the latter had been laid out, were formed. Given the utilitarian nature of the buildings and the limits of the literary evidence it is not surprising that architect's plans of *tabernae* do not survive. The closest to extant plans of *tabernae* are on the Severan *Forma Urbis Romae* (Figure 27).[1] As the great plan displays large parts of the city of Rome it is understandable that the actual detail of individual building layouts is limited. After all it is unlikely that it was intended for this purpose and may have been used for property records or taxing. Vitruvius while discussing the skills required by an architect does stress the importance of the ability to draw for communicating their ideas.[2] Such plans need not be an accurate 'blue print' of the intended project but a general guide with measurements and instructions.

The designs of a few buildings do survive such as the inscribed plan with measurements of a funerary garden at the Perugia museum in Italy (Figure 28).[3] A unique, but very rough, ground plan of a house with room names can be seen on a papyrus from Oxyrhynchus (Figure 29).[4] There are, as yet, no scale drawings in existence from the Roman period and in the case of the Perugia plan the written measurements do not correspond to the actual structure. Another architectural practice was to inscribe the intended building plan on the pavement beside or inside the actual structure. One such example is thought to have been for the Pantheon in Rome. The reported plan of the Pantheon is unique, as it comprised a full-scale drawing of the building chiselled into the ancient pavement. Perhaps, these 'blueprints' served as indicators for the contractors which were aided by an on site sketch of the building to measure and size the architectural

[1] Packer, J.E. (1967) p. 81; McKay, A.G. (1975) pp. 76-7; Loane, H.J. (1979) p. 113; MacDonall, W.L. (1986) p. 122; Adams, J-P. (1994) p. 14; Purcell, N. (1994) p. 661
[2] I.iv.3-5
[3] Ling, R. (1985) p. 16 & fig. 19
[4] P.Oxy. XXIV 2406; Alston, R. (1997) p. 26 & fig. 1

elements.[5] Another such large-scale drawing, from the Greek period, was found belonging to the Temple of Apollo at Didyma in Turkey.[6]

There are no examples of similar structure plans in Roman Britain. This is not surprising as the plans above are for monumental structures and massive public works inscribed in stone rather than commonplace *tabernae*. Sketches of buildings do exist and a tile found in London may possibly have been one of these. It seems to depict a roughly sketched cross-section of an indeterminable building that may have been a lighthouse.[7] The sketched representation of a building on wall plaster from the Hucclecote villa in Gloucestershire seems to represent a two-storied house with a gabled roof (Figure 30).[8] Although the illustration may be incomplete it can be seen that it was not of the building that contained it. The depiction clearly shows a building with an upper storey and two arched entrances, and bears a marked resemblance to the façades of many of the *tabernae* found in the *insulae* of Italy. However, why a depiction of an urban building should be drawn on a portion of wall plaster in a rural villa is unknown.

Given their universality and utilitarian nature it is hardly remarkable that plans of *tabernae* do not exist in any part of the empire. If plans were drawn they probably consisted of little more than lining out the area of the buildings on the ground before construction. At their most ornate level a rough drawing may have been made on some perishable material such as the papyrus from Oxyrhynchus. As these structures are relatively simple, intricate architectural plans were not needed.

One of the major difficulties when examining building plans is that they are two-dimensional shapes and this limits the amount of extrapolation that can be made concerning a three-dimensional building. The other problem as pointed out in the previous chapter is that structures from Roman Britain mostly only survive to a level just above the foundations and give little indication as to whether the building had more than one floor level. Despite these restrictions some social and economic comments can be made concerning the house design of *tabernae* in Roman Britain. A generalisation that can be

[5] Haselberger, L. (1995) pp. 57-61
[6] Haselberger, L. (1985) pp. 114-22
[7] de la Bédoyère, G. (1991) p. 15
[8] Clifford, E.M. (1933) p. 353; McWhirr, A. (1981) p. 144

made is that there must have been rational reasons in the minds of the builders for choosing one particular shape over another to build houses and rooms.[9]

i) The Design of *Tabernae*

The *taberna*, in all its myriad functions, seems to have been universal and can be found in Roman settlements, towns and cities in every part of the empire.[10] Strip-building *taberna*-houses are one of the most common types of structural form that can be seen during the early Roman settlement of Britain. In their simplest configuration they consist of what appear to be utilitarian, relatively long, narrow, rectangular plots, perpendicular to the street, combining the function of a dwelling and shop.[11] *Tabernae* could range from a single roomed *taberna*-dwelling but more usually they were composed of two rooms with a single façade. Later additions can show a considerable diversity of plan with larger complexes consisting of a *taberna* with one or more living rooms to the rear. A *taberna* could be a single independent building within a plot or benefit from the mutual support of neighbouring shops, as in the case of *insula* xiv at Verulamium, to present an unbroken façade to the street. The layout of the internal divisions of *tabernae* almost habitually follow a pre-set pattern with the rooms that fronted onto the street being used as a shop or workshop with the following chambers performing the function of a living area or store.[12] This sequence becomes more distorted with later developments but, as would be practical, the front of the house will invariably still be confined to selling or manufacture. Further indications of their commercial nature can be seen by their location along street frontages, from which they were usually separated by a covered pedestrian walkway.[13] As a building type strip-buildings are invariably confined to sites that are considered as towns and are absent from rural sites.[14]

It should be observed that this relatively simple picture might be distorted by the frequently incomplete investigations of ground plans in the earliest levels of the towns.

[9] Asami, Y. (1997) pp. 385-7
[10] Anderson, J.C. (1997) p. 331
[11] Blagg, T.F.C. (1991) p. 10
[12] Todd, M. (170) p. 121; Wacher, J.S. (1995) pp. 66-7
[13] Wacher, J.S. (1989) p. 113
[14] Esmonde Cleary, A.S. (1989) p. 75

The efforts to trace full plans can be made especially arduous by the restriction imposed by urban archaeology. Buildings of a quite complex organisation could easily escape identification in the small excavation trenches dug from the surface of the more fully investigated later Roman houses. Slightly more ambitious rectangular buildings have been recorded that were subdivided into more than two rooms for example in Buildings J and K on Newgate Street,[15] F at Watling Court in London,[16] C at Margidunum[17] and 2A at Sapperton.[18]

While the expansion of a rural dwelling can take place in any direction without limitation in the surrounding area, save for that of the terrain, lateral growth is often not possible for houses in towns. Limits were imposed on the extent of a structure in an urban settlement by neighbouring plots, but they may also have been subject to certain legal restrictions, especially if the building lay on a street-frontage. One of the defining features of a Roman settlement was that it was subject to a set of regulations that were modelled on that of Rome. The *lex Julia Municipalis* contained detailed regulations on the urban fabric.[19] Whether such laws existed in Roman Britain is not known.

It is more than likely that urban property became progressively more costly and scarcety the closer it came to the settlement centre.[20] When Caesar commissioned Cicero and Oppius in 54 B.C. to buy the land he needed to construct the *Forum Iulium* in the centre of Rome it was very costly, as it had to be purchased from individual owners and was an area of intense commercial exploitation.[21] This expense would have put an even heavier premium on *taberna* frontages, as profits and even survival could have depended upon it. The result of this was the occurrence of narrow building frontages especially near the centre. Furthermore, most of the shopkeepers built their *taberna*-fronts right up to the very line of their property in order to make use of every available piece of land as frontage

[15] Roskams, S. (1980) pp. 203-7; (1983) p. 406; Perring, D. (1987) p. 150; Perring, D., Roskams, S & Allen, P. (1991) pp. 13-7
[16] Perring, D. (1991) pp. 55-6; Perring, D, Roskams, S. & Allen, P. (1991) pp. 30-6; Milne, G. & Wardle, A. (1993) p. 144
[17] Todd, M. (1969) pp. 63-5
[18] Goodburn, R. (1976) p. 326; (1979) p. 295; Simmons, B.B. (1976) pp. 5-11; (1995) pp. 162-4; Grew, F.O. (1981) p. 336; Rankov, N.B. (1982) p. 256; Frere, S.S. (1986) p. 390; (1988) p. 447; Burnham, B.C. & Wacher, J.C. (1990) pp. 304-6
[19] Wallace-Hadrill, A. (1995) pp. 49-50
[20] Wacher, J.S. (1998) p. 86
[21] Cic. Att. 4.16.8; Pliny NH 36.103; Suetonius, Iul. 26.2

space. This is conceivably one of the clearest indications of the great value placed on property size.[22] Thus, *taberna* frontages were small, as it was far less expensive to construct a building in this fashion. The adjacent *taberna* frontages being of similar lengths, at least initially, would have compensated the structural disadvantage of this.[23] The natural consequence of any development would have been the creation of lengthy buildings running back from the street.[24] As a result the cost of construction in towns would in most cases have been dictated more by location and competition with others then legal restrictions.

The general elongated appearance of *tabernae* was dictated by the attempt to maximise the density of occupation on the frontage.[25] This was achieved by placing as many buildings into as economical a space as possible. The effect of this was that the early *tabernae* of Roman Britain could normally be found in the centre of towns and were competitive with each other in their demand for space.[26] There may have been instances where the streets of town centres were heavily built up with buildings butted up against one another.[27] Densely packed street frontages can be seen at Silchester[28] and Caerwent[29] where almost the full extent of the main east to west street closest to the forum seems to have been owned by *tabernarii*. These strip-buildings clearly show the commercial nature of these towns. Their close spacing and their long plots emphasis that street frontage space was at a premium and at the same time gave an impression of economic vitality. In an economically successful urban community the occurrence of closely packed unpretentious *tabernae* at the cardinal point of a settlement is to be expected.[30] These simple utilitarian romanized buildings reflect the attraction of artisans to the early urban settlements and this would further imply a certain density of occupation.[31]

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[22] Quiney, A. (1995) p. 127
[23] Collingwood, R.G. & Richmond, I. (1969) p. 125
[24] Walthew, C.V. (1975) p. 200
[25] Sommer, C.S. (1984) p. 48; Blagg, T.F.C. (1991) p. 10
[26] Freeman, T.W. (1958) p.112
[27] Wacher, J.S. (1978) pp. 63 & 88
[28] Fox, G.E. (1892) pp. 164-74; (1895) pp. 444-59; Hope, W.H. & Fox, G.E. (1896) p. 216-7; Hope, W.H. & Fox, G.E. (1900) pp. 229-30; Hope, W.H. (1908) p. 200; (1909) pp. 477-9; Boon, G.C. (1974) p. 96; Walthew, C.V. (1987) p. 227; Blagg, T.F.C. (1991) p. 10
[29] Ashby, T., Hudd, A.E. & Martin, A.T. (1902) pp. 147-51; Ashby, T., Hudd, A.E. & King, F. (1910) pp. 7-20; (1911) pp. 421-43; Nash-Williams, V.E. (1930) pp. 229-31; Liversidge, J. (1968) p. 75
[30] Millett, M. (1990) p. 107
[31] Schofield, J. & Vince, A. (1994) p. 64

The proposed use of a *taberna* may have determined the size of a retail establishment and this would in turn have been dependent on the configuration of the proposed site. The layout of the larger towns and cities of Roman Britain commenced from what were for the most part virgin sites rather than being the result of a gradual process of accretion. The popularity of the grid plan was probably that it was relatively easy to lay out and as a method it was particularly suitable if measured apportionment of land had to be made quickly and efficiently, as was presumably the case during the years of foundation. The internal plot distribution also tended to create stereotyped allotment patterns. This practice continued through the Republic to empire but it is not well documented.[32] The plots that it produced were of a suitable shape for the erection of buildings serving a great variety of functions.[33] A square or rectangular plot lends itself more readily to retail development and the minimum land requirement will in most cases have been sufficient. A triangular or irregular shaped site will result in unused plots of land.[34] However, if this were the only space available it would have been used. The uniformity of plan configuration among *tabernae* is likely to be a consequence of the regularity of plot size. Furthermore, the number of more or less equal-sized properties implies independent owner-occupiers and the likelihood is that each plot served the needs of roughly similar family units.[35]

The street layout and property boundaries would have both created and imposed restrictions on buildings, and along with the comparative expense of property in urban settlements, land had to be used as efficiently as possible.[36] Any subsequent development would have then been confined within the extant urban framework as defined by the network of streets. These restrictions influenced the élite to move to the suburbs where there was less competition for space.[37] However, an effort to fit into the grid pattern of towns does not fully explain the development of the rectangular plan, as narrow rectangular *tabernae* with their fronts facing onto the street exist along virtually every settlement regardless of size. Indeed, the smaller of these were not planned on a grid pattern. This

[32] Duncan-Jones, R.P. (1976) p. 10; (1990) p. 124
[33] Johnson, J.H. (1967) p. 26
[34] Snow, W. & Scott, K. (1984) p. 217
[35] Ling, R. (1997) p. 241; Nappo, S.C. (1997) p. 99
[36] Schofield, J. & Vince, A. (1994) p. 63; Quiney, A. (1995) p. 127
[37] Laurence, R. (1994a) pp. 80-1

emphasises the belief that strip-buildings were primarily the result of competition for space and a prime location especially in the case of *tabernae*.

The adoption of the rectangular shape of the *tabernae* may not simply have been an attempt to fit the dwellings into a street frontage that was designed to fit as many buildings into as small as space as possible.[38] The shape and size of individual buildings also contribute to the outline and definition of properties, particularly along street sides. One obvious consideration is that it was an expression of the assimilation of Roman methods and customs by the inhabitants. It can be presumed that many of those who found themselves in the Roman towns were native Britons who were not only attempting to emulate their Roman neighbours but saw advantages in the uses of rectangular over circular plans.

One of the factors in the minds of those building would have been to minimise the volume of the wall material in the structure. As a house form there are far greater material savings to be gained from a round building. As a shape, the level of frontage, depth and height are reduced making the roundhouse the optimal design. The overall shape also provided the largest common living area and reduced heat radiation, an important consideration in a cold country. On the other hand, if a dwelling is to have more than one room then the optimal shape cannot in general be circular. This becomes even clearer when the rooms are not of equal sizes. Activities need space and it is natural to expect that buildings will be designed so that their form will efficiently accommodate important occupations. Therefore, each chamber within should easily contain these activities. These movements can sometimes bring a variety of activities with them and the building must be able to accommodate a certain continuum of activities. Even in functional rooms, such as the shop or work area, that have specific uses, the freedom to arrange activities within the chamber could be required. This must have been the case in the smaller *tabernae* where the rear of the building was probably used for cooking by day and for sleeping at night. Thus, not only was a minimal space required, but also a certain liberty to allocate that space. Ideally all the space within a house should have the potential to be filled efficiently and a round building does not meet this requirement.[39] Based on both minimal wall material and

[38] Schofield, J. & Vince, A. (1994) p. 66
[39] Asami, Y. (1997) pp. 385-97

activity criterion the optimal shape for a building with more than a single chamber is rectangular.

Rectangular buildings also have an additional quality in the use of serial patterning of space, as the adding of appendages to the exterior of curvilinear buildings is extremely difficult. Rectilinearity also aids rapid settlement growth because erecting a rectangular building is quicker, especially with modular building units such as bricks.[40] The use of houses in this more romanized way required not only the development of the architectural form but also an acceptance of the associated ideology by those who owned the dwellings and by those who were to be impressed by it. It is possible that the preference for a rectangular shape was in response to social changes amongst the native Britons and the constraints imposed on all inhabitants by the close packing of dwellings. Away from the demand for space on major thoroughfares the greatly diminished commercial influences allowed for a greater degree of freedom and diversity in house width. Residential areas would have permitted the less restricted development of buildings with larger or at least broader plots.[41]

ii) *Taberna* Plan Development

Once a building was occupied and utilised the changing patterns of use will continually alter the original design so that it conforms better to the ideals of the inhabitants rather than, to use the term loosely, that of the architect.[42] Initially the early *taberna* façades and lengths were of similar spans and this would seem to demonstrate a possible level of economic comparability between the retailers. Any variations that are found between neighbouring buildings are often marginal. The two strip-buildings discovered in Newgate Street in London were originally of similar lengths (Figure 31).[43] The rear walls of the period 1 shops in *insula* xiv at Verulamium, although not continuous, do show blocks of buildings with comparable lengths (Figure 2).[44] The same occurrence can be seen in at

[40] Fletcher, R. (1995) p. 144
[41] Perring, D., Roskams, S. & Allen, P. (1991) pp. 99-100
[42] Locock, M. (1994) p. 7
[43] Roskams, S. (1980) fig. 3; Perring, D., Roskams, S. & Allen, P. (1991) fig. 13
[44] Frere, S.S. (1972) fig. 8

least four of the earlier buildings along the roadside of *insula* viii at Wroxeter (Figure 32).[45] The buildings of the third phase of House XVIs, Caerwent, were of similar lengths before their amalgamation.[46] The original parallel buildings of House XXVIn were also equally proportioned (Figure 34).[47] It has been observed in rectangular villas that they are approximately twice as long as they are wide. Although there are some variations found on individual sites these are small and do not upset the overall ratio of 2:1.[48] In general it does not appear that there was an established width of length relation to strip-buildings. An expansion in the length of a *taberna* did not involve a corresponding increase in its width, nor could there have been given the close spacing between dwellings.

The addition of appendages to the rear of premises was a common practice and one that can be seen in many towns. In London increased social ambition is well indicated by the introduction of 'reception quarters' to structures that had previously seemed entirely functional.[49] Both Buildings J and K in London's Newgate Street had additional rooms located to the rear of the structures (Figure 31). A later partition was also placed in room iv to create another room in Building J.[50] The clearest example of this occurrence on a more general level can be seen at Caerwent, emphasising at the one time individuality and the growth of personal prosperity. House XXVIn was built in the late first century and as is usual combined both a workshop and residence. Some thirty years after its initial construction a wing consisting of three rooms, one of which contained a mosaic, was added to the rear. During the middle of the second century a third wing was added along with a colonnade.[51] Rooms 1 and 2 of House XIXn do not occupy the full width of the building and were presumably later additions. Room 1 was added to the rear of the structure and Room 2 was a later partition of Room 3. It was also noted that the walls of both rooms were not bonded to the original superstructure.[52] In the adjacent House XXn there is the addition of Room 1 at the back of the building and Rooms 4 and 5 were partitions of Room

[45] Bushe-Fox, J.P. (1913); (1914); (1916); Wacher, J.S. (1995) fig. 165
[46] Ashby, T., Hudd, A.E. & King, F. (1911) fig. 14
[47] Walthew, C.V. (1987) fig. 3
[48] Berry, C.A.F. (1951) p. 25
[49] Perring D. (1987) p. 150
[50] Roskams, S. (1980) p. 406; Perring, D., Roskams, S. & Allen, P. (1991) pp. 14-7
[51] J.R.S. 37 (1947) p. 165; 38 (1948) p. 81; 39 (1949) p. 96; Dunning, G.C. (1948) pp. 93-5; Nash-Williams, V.E. (1948) pp. 56-9
[52] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 11-3

3 (Figure 33).[53] The joints of room 5 of House XVIIIs show that it was a later addition (Figure 35).[54]

Originally building VI.5 at Cirencester was of simple design and consisted of two rooms. During the later modifications and subsequent enlargement the partition wall between rooms 1 and 2 were demolished and six additional rooms were then added to the end of the structure (Figure 12).[55] This custom of embellishment can be seen in the *tabernae* at Verulamium in *insula* xiv during the beginning of the second century. The plan of Period IIB (A.D. 105-30, Figure 4) indicates the start of the obvious expansions to the rear of the premises. By Period IIC (A.D. 130-50, Figure 5) the resultant expansions to the end of the site necessitated a radical re-planning.[56]

iii) Amalgamation of *Tabernae*

It would seem that, from the very beginning of the Roman settlement, but certainly as sites developed, *tabernae* were not entirely equal but frequently varied in the total area of their ground plan. This may represent a differentiation in the proportion of accumulated profit and available capital to invest in improvements and construction. The circumstances of this can be observed in the enlargement of premises but is most explicit in the procurement of adjacent private property.

An occurrence of this can be found in Wroxeter, *insula* viii, site VI (Figure 36).[57] The area was initially composed of three *tabernae* that were constructed of wattle-and-daub. They were subsequently rebuilt with walls of a rough masonry and later amalgamated into a more substantial building. The actual incorporation involved the original alleyways between the structures being converted into corridors and rooms.[58] As a consequence of these acquisitions the shopkeeper was able to make a more comfortable-sized home.

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[53] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 17-8
[54] Ashby, T., Hudd, A.E. & King, F. (1911) p. 437
[55] McWhirr, A.D. (1978) pp. 76-7; Holbrook, N. & Timby, J. (1998) pp. 230-9
[56] Frere, S.S. (1972) p. 12
[57] Holbrook, N. (1998b) pp. 189-211
[58] Bushe-Fox, J.P. (1916) pp. 4-20; Wacher, J.S. (1995) p. 371; Walthew, C.V. (1975) pp. 191-2; Crickmore, J. (1984) pp. 66 & 81

This was a frequent occurrence at Caerwent and can be more broadly examined within a townscape due to the large-scale excavation of the site. As with site VI at Wroxeter House XVIs was formed by the amalgamation of three separate buildings (Figure 35). The result of the alterations and adaptations of the three structures was that the forms of the earlier buildings are difficult to determine except towards the front of the house. The culmination of the renovations was a courtyard house with hypocausts and pavements.[59] House XVIIIn was composed of three distinct structures as the earlier wall lines have been traced below the main building (Figure 34). These were subsequently combined by uniting the rooms of the three buildings that fronted onto the street.[60] While House XVIIIn was united at the front XVIs was amalgamated towards the rear. This was achieved by the addition of two rooms (22 & 23), at the expense of the room 5 of the central building, projecting over the alleyways on either side of the structure. The front room of the eastern building was also subdivided from a single room into six chambers.[61] The fully evolved House XXVIn was the result of the incorporation of two strip-buildings separated by a passage. Both structures were of similar composition and were divided into two parts. The front single room was a combined workshop and storage area and the residential zone behind was made of four chambers. These were eventually merged to form a courtyard dwelling with a colonnade.[62] There were probably many occurrences of property amalgamation but these have been lost or obliterated through the piecemeal nature of these developments. This may in some way explain many of the complicated wall lines that have been found from underlying periods. Certainly the plans of some of the more expansive buildings do hint at the possibility that they were once built over several individual plots. There is more than just a suspicion that a great many town houses began their life as commercial premises.[63] Some even retained their original connection with commercial premises after their enlargement.[64]

[59] Ashby, T., Hudd, A.E. & King, F. (1911) pp. 421-6
[60] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 7-11
[61] Ashby, T., Hudd, A.E. & King, F. (1911) p. 433
[62] Dunning, G.C. (1948) p. 94; J.R.S. 39 (1949) p. 97; Nash-Williams, V.E. (1948) pp. 56-7
[63] Wacher, J.S. (1989) p. 93
[64] Wacher, J.S. (1974) pp. 282-3; (1989) p. 93

In Building 20, a substantial courtyard house in Colchester, two of the four rooms fronting onto the street were workshops (Figure 16).[65] The possible courtyard house, Building 113, retained its connection with commerce with a workshop next to the street and a high-class mosaic in the next room.[66] The rooms on the frontage of Building 16 and the succeeding Building 19 were also used as workshops.[67] Building 70 on the Middleborough site in Colchester was a substantial building with rooms arranged on at least three sides of a courtyard house (Figure 18).[68] There may also have been a tendency, similar to that seen in Pompeii, to open shops along the street fronts in the existing dwellings of the *insulae* at the expense of the front rooms of houses. If this was the case then the new shops probably remained the property of the original owner from whose house they had been developed. The *tabernae* could have then been leased to retailers either connected to or independent of the house. Those *tabernae* with access to the larger dwelling may have been run by the owner or through the agency of a trusted freedperson or slave.[69]

iv) Commercial Planning

As a rule the expansion of a successful business could only take place by extending to the rear or by buying up neighbouring premises.[70] This occurrence not only illustrates the economic success of one entrepreneurial proprietor but at the same time his or her individuality. On the whole, *tabernae* buildings appear to have been constructed separately and usually did not share a common wall. The plans themselves were normally separated by eavesdrips, drains or narrow alleyways.[71] Sjoberg has said that there is little evidence for any formal and purposive planning in the economic realm by either the business community or local government in preindustrial society. For him the lack of 'rationization' was based on the low prestige accorded to commercial ventures.[72] Overall planned

[65] Crummy, P. (1984) pp. 62-3; Wacher, J.S. (1989) p. 113
[66] Crummy, P. (1992) pp. 79-82; Wacher, J.S. (1995) p. 125
[67] Crummy, P. (1984) pp. 50-54; Fulford, M. (1989) p. 190
[68] Crummy, P. (1984) p. 159
[69] Ling, R. (1983) p. 54
[70] Wacher, J.S. (1998) p. 86
[71] Sommer, C.S. (1984) p. 48
[72] Sjoberg, G. (1960) p. 209

retailing is the deliberate development of an area in a co-ordinated manner for retail use and is usually under single ownership.[73]

Pertinent to this discussion is Frere's excavations of *insula* xiv at Verulamium. It has been proposed that the Claudian shops were constructed and owned by a single individual, such as a Catuvellaunian noble, perhaps with some official assistance, and hired out to tenants (Figure 2).[74] These *tabernae* were later reconstructed and replaced by separate timber dwellings that were divided by narrow lanes. This was thought to reflect private ownership as the former tenants had gained sufficient capital to buy out their lease and not only rebuild but also exploit the property to the rear of their premises. By the third century the masonry shops seem to have merged into two distinct groups. Although these examples reflect the eventual greater economic prosperity of the individual shopkeepers the early development of *insula* xiv at Verulamium seems to be the opposite of those noted elsewhere.

A reappraisal of much of Frere's evidence does cast some doubt on his conclusions. Perring[75] and Millett are especially critical of many of Frere's theories; they believe that his conclusions on the ground plans were based upon what were perhaps exaggerated projections and conjectured wall lines. Frere does qualify his statement on the matter by accepting that there is a stark simplicity in the plan, which may have been over emphasised, owing to the difficulty in tracing the unburned appendages to the rear of the shops.[76]

While this may be the case, an analysis of the 1972 Period 1 plan seems to show that it could not have been planned and roofed as a single unit, which was one of the determining factors for Frere's belief that it was constructed as a corporate enterprise. The reason for this is that the series of shops was not exactly regular and the absence of a continuous rear wall parallel to the frontage would make any such roofing difficult.[77] The plan also appears to indicate appendages to the rear of some of the shops, for example behind Room 3, although this may be justified due to its location at the corner of the *insula*, and thus may have been its continuation, but there is also a projection behind Room 19 as well as other ambiguous rooms. This makes any continuous roof theory even more

[73] Guy, C.M. (1994) p. 12
[74] Frere, S.S. (1972) pp. 12-3
[75] Perring, D. (1987) pp. 147-50
[76] Frere, S.S. (1972) p. 14

problematic. The possible uniformity is made further tentative as two wall lines between Rooms 8 & 9 and 20 & 24 have been conjectured and are not backed up by any archaeological data. They may create the illusion of a greater degree of standardisation than in fact existed. Even the slight degree of individuality during the very initial stages of the block's development would suggest that individual tastes and requirements were being consulted, and the whole block was probably not the work of a single individual or corporate body. Although this cannot be said beyond any doubt it would seem that the plan might indicate the likelihood that they were constructed as independent units and follow the patterns found in other towns of Roman Britain. Building lots were divided before the establishment of structures and it is unlikely that one individual would have had suitable amounts of capital to buy up and redevelop an area that was commercial advantageous to so many other potential retailers. In general, the Roman authorities were seldom concerned with trade and commerce and would not have been involved in commercially planning in Roman Britain beyond *fora* buildings and possibly *horrea*.[78]

Summary

The possibility that plans will be found archaeologically for what are utilitarian structures in Roman Britain is unlikely. The uncomplicated plan of the *taberna* was an architectural unit so simple and so malleable that it could be adapted to almost any context and develop from a single retailing outlet composed of two rooms to being part of the frontage of a more complex building. The rectangular form was probably the result of an attempt to fit as many structures as possible into what may have been a prime retail location. These simple structures could easily be adapted and developed by the addition of appendages to the rear or the amalgamation of neighbouring premises. The later additions probably show a greater level of prosperity and economic success for the owner who wished to display their success through their building and create a larger home. Although the number and narrow nature of these *taberna* structures clearly represent the commercial atmosphere of these early settlements there is little evidence of any attempt at corporate

[77] Millett, M. (1990) p. 70
[78] Meijer, F. & van Nijf, O. (1992) p. 78

planning above that of the individual retailer. As a plan form the *taberna* was a typical feature of Romano-British settlements that had obvious analogies in north-western Europe and Italy itself.

Chapter IV

Room Usage in *Tabernae*

Houses are the living space of people and how they were arranged may indicate how the inhabitants viewed their world.[1] Many crafts and trades must have been practised in *tabernae*, although it is rare that specific industries can be identified. Since census returns are non-existent and tombstones naming specific occupations are rare, knowledge of the economic activity of any Romano-British settlement is based on those industries that have left recognisable traces on the ground.

Horace describes the *taberna* as the humble place of the poor.[2] While *tabernae* have been defined by Boëthius as being 'shop-houses' or '*tabernae*-houses'[3] (see Chapter I.i) they were not really domiciles in the modern sense, but were more simply an extension to a retailer's place of business. The use of such units as dwellings is attested in a definition by Ulpian.[4] In Britain they consisted of a large room on the frontage and the rear of the building was partitioned into much smaller apartments. It is normally assumed that this larger room was the main shop floor, and this was where much of the production, buying and selling took place. This supposition is based not only upon comparisons with such places as Pompeii, Ostia and Herculaneum, but also on the evidence of industrial furnaces that in many cases were situated in this area. To the rear of this, the *taberna* was further partitioned into what are assumed to have been either storage or living quarters for the occupants.[5] Although the term *taberna* refers to both shops and workshops this chapter will attempt to distinguish between those that were involved in manufacture and retailing alone and then explore the domestic zones of shop-dwellings. There was a division of *tabernae* between occupation and residential quarters and the inter-relationships of the seemingly mutually exclusive nature of these categories will be discussed.

Evidence of building plans and structures is important, to give an indication of the relative success and wealth of the individual occupier, but by themselves they are limited,

[1] Scott, E. (1990) p. 152
[2] Car. 1.4.13-14
[3] Boëthius, A. (1934) p. 164
[4] Dig. 50.16.183; Pirson, F. (1997) p. 168
[5] Collingwood, R.G. & Richmond, I. (1969) p. 127; Wacher, J.S. (1995) pp. 66-7

as they cannot pinpoint the exact function of a *taberna*. Many of the *tabernae* in Britain were of the strip-building variety but many must also have been the dwellings of people who worked the surrounding land or who had nothing to do with retailing *per se*.[6] A building that appears utilitarian in character cannot be presumed to be a *taberna*. Many *tabernae*, like modern shops today, were composed of spaces easily adapted for different purposes. Most crafts probably did not require distinctive workshops and would not appear in the archaeological record. This is not an attempt to develop an argument based purely on negative evidence but to point out that although a strip-building is lacking in artefactual remains this cannot be taken as proof that it did not have a commercial or manufacturing role. As a consequence the bias will always be towards those industries that required large amounts of heat and supplies, or produced a great amount of waste, or some unusual condition.[7] Despite these limitations there is a continually growing corpus of evidence that seems to confirm the commercial and industrial activity of these buildings. While interpreting the function of a building is a task in itself, that of individual rooms can be even more complicated, unless some unmistakable attached equipment or artefact can be found.[8]

The evidence for the production and consumption of manufactured goods is restricted by the quality of the archaeological record. In many cases the artefacts simply do not survive or they are difficult to trace to the source of production. As a result there has been a tendency to focus upon those activities that produced an abundance of durable items such as pottery and metalworking.[9] When examining workshops it should be noted that in many industries the artisan would carry out the whole manufacturing process from the preparation of raw materials through to the sale of the finished goods, but in others varying degrees of specialisation could have taken place. The workshop then typically produced a product using specialised equipment that would not be generally available. Since such distinctive equipment would be unique to a specific industry, it may allow for the identification of a particular activity.[10] Waste products are a common residue from workshops, and metal working in particular produced large quantities of waste, the study of

[6] Todd, M. (1970) pp. 120-1; Burnham, B.C. & Wacher, J.S. (1990) p. 46
[7] Schofield, J. & Vince, A. (1994) p. 118
[8] Burnham, B.C. & Wacher, J.C. (1990) p. 46
[9] Fulford, M. (1989) p. 190

which can be used to investigate the processes carried out.[11] As artefacts are apt to be moved, it is only when they can be associated with a particular structure and industrial waste that they will be discussed below. The mapping of artefacts as a secondary group in context may not produce satisfactory results.[12]

It can be presumed that a *taberna*, especially a retail store, will normally be cleared of all its stock before abandonment leaving behind little indication as to the activities within. It is only when a *taberna* owner has been unexpectedly caught by some disaster, like a fire, that a building will be found fully stocked. Hence, a whole range of the activities that must have taken place in *tabernae* is inevitably invisible.[13]

i) Producers

The type of floor-surface found in any particular room may serve as an indication of the activities within. Wacher has used the evidence of thick occupational débris and successive floor-levels found in the buildings of *insula* v in Cirencester to suggest commercial operations.[14] In their simplest and most crude form the floor of a workshop would have consisted of little more than beaten earth but other functional surfaces were also used. In Sapperton the workshop floor consisted of stone flags.[15] While this may serve to suggest their utilitarian function, as these would have been the natural surfaces in a workshop, the identification of furnaces or hearths can give more weight to this assumption. The size of a hearth located in a room will also be important as it is assumed that a small hearth will have been used for domestic activities and a more substantial one for industry.

The furnace would have been the essential piece of equipment in any manufactory. Its significance is quite evident as it would have been the largest and sometimes the most

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[10] Laurence, R. (1994) p. 55
[11] Schofield, J. & Vince, A. (1994) pp. 106, 114-6
[12] Schofield, J. & Leech, R. (1987) p. 3
[13] Burnham, B.C. & Wacher, J. (1990) p. 46
[14] Wacher, J.S. (1965) p. 99
[15] Goodburn, R. (1976) p. 326; (1979) p. 295; Simmons, B.B. (1976) pp. 5-11; (1995) pp. 162-4; Grew, F.O. (1981) p. 336; Rankov, N.B. (1982) p. 256; Frere, S.S. (1986) p. 390; (1988) p. 447; Burnham, B.C. & Wacher, J.C. (1990) pp. 304-6

costly construction in the workshop.[16] The discovery of hearths and furnaces is a frequent feature of the type of structures under discussion. Large and substantial hearths were found in the buildings of Fenchurch[17] and Newgate Street[18] in London implying an industrial function. It is likely that these were used in the production of goods sold at the frontage.[19] The large amount of slag found at Newgate Street was no doubt derived from these hearths. Most of this was fuel ash slag but it also contained a considerable quantity of iron working and smithing slag.[20] At Caerwent the large quantity of iron slag discovered in the front room of the western strip-building on site XXVIn possibly show its employment in manufacture.[21]

1) Metalworking

Of all the industries metalworking is perhaps the most easily recognisable in the archaeological record, and can be found on almost every Roman settlement in Britain. Although it was commonly carried out it in towns it is difficult to establish the scale of the enterprise and the actual process being carried out.[22] Verulamium has provided a good example of a town containing artisans occupied with metalworking. At the northern end of the building complex in *insula* xiv there were strong traces of metalworking. Presumably these were *tabernae* of individuals that manufactured, sold and repaired metal items. Room 27, period I, may have been a bronze-smith's workshop as a large hearth was found in the in the eastern corner of the room near to the entrance (Figure 2). To the west of this three rectangular emplacements were discovered. Analysis has shown that they contained bronze powder and some traces of iron. It was thought that this was an apparatus that stood under or at the end of a workbench to trap the waste from lathe-turning, engraving or filing bronze for resmelting later.[23] These also occur in the front of rooms 9, 20 and 22 during

[16] Cable, M. (1997) p. 315
[17] Frere, S.S. (1989) p. 306
[18] Perring, D., Roskam, S. & Allen, P. (1991) pp. 97-9
[19] Roskam, S. (1980) p. 406; Perring, D., Roskam, S. & Allen, P. (1991) p. 13
[20] Perring, D., Roskam, S. & Allen, P. (1991) p. 10 & 101
[21] Walthew, C.V. (1975) p. 194 note 49
[22] Schofield, J. & Vince, A. (1994) p. 105
[23] Frere, S.S. (1959) p. 4; (1972) p. 18. In one of the third century buildings at Catterick a bronze or coppersmith's workshop contained a similar tray. The analysis of this tray found the material contained within to be brass. Burnhan, B.C. & Wacher, J.S. (1990) p. 115; Wilson, P.R. (1999) p. 384

period IIA (Figure 3) and room 13 in Period IIB (Figure 4).[24] Room 23, in period IIA, contained metal residue and a fuel-box in the form of a rectangular pit. A similar deposit of occupational material that contained charcoal and burnt fragments of bronze and iron was discovered in room 19.[25]

In the early excavation of the original Forum area at Wroxeter a shop was found to contain the remains of a small furnace and a small cylindrical stone that may have been used to support an anvil. Strewn across the ground was a large quantity of *scoriae* from molten metal both inside the shop and outside. Many fragments of worked metal including bronze hairpins, a large *fibula* and various other items were recovered from the room. To one side of the *taberna* floor there was a quantity of pulverised granite that may have been used for enamelling and fragments of fine glass that could have been used for inlay. The small size of the furnace and anvil support indicates that the activities within were not on a large scale. It is possible that this establishment was the workshop of a jeweller or manufacturer of small ornaments.[26]

An interesting feature of the strip-buildings in *insula* viii in Wroxeter was the number of furnaces that contained traces of metalworking. Evidence was found for the casting of bronze brooches and small busts. Several crucibles were discovered and one of these contained slag with a small globule of silver embedded in it. There was also evidence of cupellation furnaces for extracting silver from lead alloys. It seems that bronze and silver casting took place on this site through the process of *cire perdue*.[27]

During the excavations along the main Roman road at Borough High Street, Southwark, in London, a series of first century timber-buildings were found. Most contained hearths, some of which were associated with, iron working. In the early second century one of these contained a series of hearths, iron smithing slag, hammer scale, and tiny particles of metal produced by shaping hot metal on an anvil indicating that this building may have been a blacksmith's forge.[28]

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[24] Frere, S.S. (1972) pp. 19 & 42
[25] Frere, S.S. (1958) p. 6; (1972) p. 27
[26] Wright, T. (1879) pp. 159-66; Liversidge, J. (1968) p. 190; Wacher, J.S. (1995) p. 368
[27] Bushe-Fox, J.P. (1913) p. 10; (1914) pp. 11, 23-9; (1916) pp. 22-33, 65; Wacher, J.S. (1995) p. 371
[28] Heathcote, J. (1990a) p. 192; Burnham, B.C., Keppie, L.J.F. & Esmonde Cleary, A.S. (1996) p. 431; Greenwood, P. & Maloney, C. (1996) p. 18; Drummond-Murray, J. & Thompson, P. (1998) pp. 48-9

In the front of building XVIIIs, at Caerwent, there was a rough hearth, beside which was a large quantity of iron slag. In room 1 the remains of a furnace, a small iron tool, an iron key and two bars of lead were found.[29]

At Godmanchester, in the late first century an open-fronted timber-framed metalworker's shop was built onto the road frontage. This structure contained a bowl-shaped smithing furnace, four shaft-furnaces for the smelting of iron and bronze, scrap metal and crucibles.[30]

An anvil position is one of the distinctive fixtures that should be present in a smith's workshop. Most reliefs that depict an anvil show it to be on a raised platform.[31] At Newstead a strip-building with a central hearth had a post setting beside it that may have been for an anvil.[32] Ashton in Northamptonshire has produced the usual features of a metal workshop, as well as a smith's hammer and a small portable anvil.[33] The stone-lined tank or reservoir found at Camerton and Broadfields may have served as quenching tanks.[34] A water-tank was also a usually feature in a smith's shop, in a location between the forge and the anvil.[35]

Sapperton perhaps typifies many of the distinctive features of these workshops. Building 2A that was significant as its front room was segregated into two sub-divisions. Between these were two substantial hearths producing chisels, knives and other iron objects. It is unclear why this occurs, perhaps it had something to do with the manufacturing process, or that these were the separate workstations of two craftspeople. What this sub-division does illustrate is a degree of complexity, and also the simple fact that this large front room could be divided for different purposes.[36]

Numerous establishments like these in towns all over the province turned out various metal artefacts.[37] However, itinerant artisans, as with many crafts, could have

[29] Ashby, T., Hudd, A.E. & King, F. (1911) p. 435
[30] Wilson, D.R. (1973) p. 289; Green, H.J.M. (1975) p. 201; Burnhan, B.C. & Wacher, J.S. (1990) pp. 127-8
[31] Manning, W.H. (1976) pp. 143-4
[32] Frere, S.S. (1990) p. 313
[33] Hadman, J. & Upex, S. (1975) pp. 13-5; Wilson, D.R. (1975) p. 253
[34] Wilson, D.R. (1974) p. 457
[35] Wedlake, W.J. (1958) pp. 62-3
[36] Goodburn, R. (1976) p. 326; (1979) p. 295; Simmons, B.B. (1976) pp. 5-11; (1985) p.18; (1995) pp. 162-4; Grew, F.O. (1981) p. 336; Rankov, N.B. (1982) p. 256; Frere, S.S. (1986) p. 390; (1988) p. 447; Burnham, B.C. & Wacher, J.C. (1990) pp. 304-6
[37] Johns, C. (1996) p. 188

carried out a great deal of metalworking. On the Priory Street site, Carmarthen, small-scale and short-lived industrial activities seems to have been characteristic throughout the Roman period. Most of the evidence for metalworking comprised hearths within simple huts that were located in the vacant areas between building phases or different buildings. The overall impression was of metalworking activity carried out by peripatetic artisans rather than residential artisans although it is difficult to prove.[38] Generally the scale of production in Roman Britain varied from the small concern, with a single hearth, to those with several, producing not only for local requirements but possibly also for a wider customer base.[39]

2) Glass manufacture

Secondary glass production rather than glass making has been commonly reported on a number of sites in Roman Britain.[40] In contrast to the considerable amount of glass finds, there is an absence of information concerning the design and workings of glasshouses during the Roman period.[41]

A glass 'factory' with a 'tank furnace' was found at Caistor-by-Norwich (Figure 37). This was an extensive establishment that resembled a house rather than a workshop. It is not clear what kind of objects were manufactured on the site, as no vessels were associated with it. The limited number and capacity of the furnaces indicates that they were not designed to carry out any form of mass production. Possibly the workshop was restricted to the supply of the local market and had little interest in expanding its production beyond that.[42] On the other hand, more ornate and exclusive items may have been produced on the premises. One of the difficulties with any identification of glass manufacture was that a single furnace could be used for the entire process as is shown on a first century A.D. pottery lamp from Asseria, Dalmatia that depicts two glassworkers at a

[38] James, H. (1993) p. 97
[39] McWhirr, A. (1982) pp. 18-22
[40] Henderson, J. (1985) p. 268
[41] Newton, R. & Davison, S. (1989) p. 24; Cool, H.E.M. & Price, J. (1995) p. 226; Jackson, M.J., Cool, H.E.M. & Wager, E.C.W. (1998) p. 55. The structural remains of glass-working sites are frequently difficult to identify throughout the empire. This occurrence can possibly be explained by the nature of glassmaking. While a great deal of waste is produced during glass manufacture from broken or misshaped vessels as well as residue from the process, these are rarely found. Thus, it has been surmised that the waste was collected and re-melted and this would mean that archaeological remains would be limited. Price, J. (1978) p. 70; (1997) pp. 331-3; Cool, H.E.M. & Price, J. (1995) pp. 6 & 224.
[42] Atkinson, D. (1931) pp. 106-24; Richmond, I.A. (1966) p. 78; Price, J. & Cool, H.E.M. (1989) pp. 24-7

furnace.[43] Another problem is that once the activity has been completed the same crucibles could be used again. This meant that the pattern of glass manufacture was a continual process and that a relatively small furnace could produce a great deal of glass. Unlike a pottery kiln, glass furnaces were not governed by the amount of vessels produced. A furnace with a small-ground plan could produce a relatively large output but this would be impossible to support archaeologically.[44]

Another glass workshop existed in the Regis House warehouse in London. In one of the bays a section of the timber flooring was removed and a glass furnace inserted. The workshop fabricated twisted glass stirring rods for mixing medicines and cosmetics and small blown bottles. Manufacturing wastes included glass moils, droplets, trimmings and cullet. Other associated finds included imported blue 'raw glass', window glass, faïence melon beads, glass *tesserae* and a finger ring.[45] In Moorgate, also in London, an important collection of glass-working débris, including part of a 'tank furnace', was discovered in association with a brick-earth and timber building dated to the early second century.[46] A 'tank' would have held a much larger quantity of glass than a crucible but the evidence of their composition is fragmentary and their overall dimensions are unknown.[47]

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[43] Forbes, R.J. (1966) p. 192; Price, J. (1976) p. 115 fig 205; Newton, R. & Davison, S. (1989) p. 109 fig. 3.41

[44] Price, J. (1997) pp. 33-5

[45] Brigham, T., Watson, B., Tyers, I. & Bartowiak, R. (1996) p. 38; Burnham, B.C., Keppie, L.J.F. & Esmonde Cleary, A.S. (1996) p. 427; Greenwood, P. & Maloney, C. (1996) p. 5; Esmonde Cleary, A.S. (1996) p. 427; Brigham, T. (1998) p. 27 & fn. 7; Brigham, T. & Watson, B. (1998) p. 45

[46] Frere, S,S, (1988) p. 463; Heathcote, J. (1988) p. 386; Lees, D., Woodger, A., & Orton, C. (1989) p. 115; Maloney, C. & de Moulins, D. (1990)p. 69

[47] Price, J. (1997) p. 335. Nearly all the glass-working sites have produced fragments of glass and this has often been taken as evidence of production. Glass finds must be treated with a certain amount of scepticism, as there is a great deal of evidence to suggest that the re-use of broken glass was not merely confined to the glass factories. A local trade in glass fragments may also have existed. Martial mentions that a flourishing system of barter existed in first century Rome, whereby broken glass was exchanged for items of small worth. 'You are just like the tramping hawker from beyond the Tiber who exchanges pale sulphur matches for broken glass'. I.xli.3-5 passages V.46-48 & X.iii.1-6 also mention the exchange of glass for sulphur. Whitehouse, D. (1999) pp. 78-9. The peddlers had a ready market as Strabo mentions that inexpensive glass was manufactured in Rome itself. 16.2.25; Leon, H.J. (1941) p. 236. It is quite possible that a similar system could have been operated in other parts of the Roman Empire, at least in the production of everyday glassware. Ward, J. (1911) p. 271; Price, J. (1976) p. 116; Smith, R.F. (1987) p. 70 The many instances of broken glass found at glass making sites may be foreign to the actual glass factory, and were to be recycled with wasters. Price, J. (1978) pp. 70-1 On the Guildhall site in London the largest single deposit of Roman glass in the north-west provinces was found. The glass was cullet glass making waste and window glass. The deposits do not appear to represent activity *in situ,* as there was no evidence for glass working on the location. Bateman, N. (1990) pp. 259-60. It would seem that the majority of glass produced in Britain was worked from cullet. Price, J. & Cool, H.E.M. (1989) pp. 23-4; Cool, H.E.M. & Price, J. (1995) p. 226. However, it has been suggested that given the amount of vessels found the level of production could not have been sustained by recycling alone. Jackson, M.J., Cool, H.E.M. & Wager, E.C.W. (1998) p. 55. In general, glass

3) Leather and fulling workshops

Many of the raw materials employed by urban artisans would have been organic and as a consequence rarely survive in the archaeological record. Nevertheless, an increasing quantity of this type of material is being recovered through soil-sampling and retrieved from anaerobic deposits, especially from waterfronts.[48] Although little information survives for those industries that produced materials of a perishable nature, leather and bone are some exceptions.

The knowledge of the mechanics of leather production in the Roman world is still limited. The industrial process of tanning required specialised equipment, and in the absence of material evidence it is difficult to identify the troughs, tanks and ovens that were used.[49] Pits were needed to hold hides for the removal of fat and hair from new hides and to tan them. In the medieval period tanning pits were at the rear of the premises.[50] Pits located near a building may have been part of this process but they leave no obvious traces.[51] A possible case of tanning was found in the western yard of xxxiv.1 at Silchester (Figure 38).[52] In this open space there was an oak lined tank that measured 19m in length and 1 to 1.5m in breath, with a clay bottom about 0.38m deep. A drain from the house debouched into the tank at one end and an effluent-channel led away from the other in a southern direction. Some form of steeping-process may have taken place.[53] Large wood-lined tanks and channels have been found in the upper Walbrook valley just inside the later city wall. These have been dated to the second century and were connected to leather working as is evident by the large deposits of leather. It is possible that this area was extensively used in the tanning industry.[54] Two successive wooden buildings were also found in the vicinity and these may have been manufactories.[55]

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was produced on a number of locations in Roman Britain but their output seems to have been limited and restricted to utilitarian items.

[48] Schofield, J. & Vince, A. (1994) p. 108
[49] Serjeantnon, D. (1989) p. 135
[50] Schofield, J. & Vince, A. (1994) p. 100
[51] Schofield, J. & Vince, A. (1994) p. 122
[52] Wacher, J.S. (1978) pp. 91 & 209
[53] Hope, W.H. (1907) pp. 446-9; Boon, G.C. (1957) pp. 192-3; (1974) p. 291
[54] Perring, D. (1991) p. 51
[55] Heathcote, J. (1989) pp. 51-2

Building v.1, at Verulamium, was an extensive building dated to the third century. In the south-western wing of the structure were three cement-lined tanks in rooms 18, 19 and 22. They were not connected to the bath structure nor were they of any know bath type and were similar to the arrangements used in fulling establishments in Pompeii.[56] On the site of the Baths Basilica at Wroxeter a series of tanks with interconnecting channels was found between wattle-and-daub buildings I-IV. These were perhaps used for tanning as up until relatively recently animal and human excreta were used in the tanning and fulling process.[57]

It is probable that such unpleasant activities as tanning and fulling would have been permitted within a town centre and may have been confined to the periphery or the suburbs of settlement.[58] This may partly explain why so few urban buildings have been connected with tanning.[59] Most extant evidence for fulling has been recorded in structures found in villa complexes. Possible traces have been interpreted in a villa near Chedworth, in Gloucestershire,[60] at Titsey, in Surrey[61] and in Darenth Villa in Kent.[62] However, in the case of the Chedworth villa what was thought to have been industrial has subsequently been re-interpreted as evidence of baths.[63] Fulling establishments did share street blocks with other *tabernae* and houses, as in the case of the *Fullonica Stephani* in *Regio* I.vi.7 in Pompeii, and presumably at other towns such as Wroxeter and Verulamium.[64] Under the legal texts the mere creation of a bad smell did not render the creator liable to prosecution.[65] It is possible that the industries of tanning and fulling were a common feature of the towns of Roman Britain.

Cobblers and other leatherworkers are equally difficult to identify. Most of the evidence for the leather industry comes in the form of rubbish dumps of leather scraps.[66] As evidence these pits are extremely limited, as they cannot give any clear indication as to

[56] Wheeler, R.E.M. & Wheeler, T.V. (1936) pp. 109-11; Niblett, R. (1987a) pp. 49-51
[57] Barker, P. (1975) pp. 106-7; Goodburn, R. (1978) p. 437; White, R. & Barker, P. (1998) p. 56
[58] Sjoberg, G. (1960) p. 99
[59] Rhodes, M. (1987) p. 176
[60] Fox, G.E. (1905) pp. 210-4
[61] Fox, G.E. (1905) pp. 214-8
[62] Fox, G.E. (1905) pp. 218-32
[63] Richmond, I.A. (1959) pp. 13-20
[64] Jackson, R. (1988) p. 52
[65] Dig. Papinian 43.8.2.29; Scobie, A. (1986) p. 416
[66] Wilson, D.R. (1974) p. 438; Wacher, J.S. (1978) p. 210; Dyson, T. (1986) p. 89; Heathcote, J. (1988) p. 384

the exact location of a leather shop, or indicate different functions for properties, save that this activity took place nearby. A 'leather pit', dated to the Antonine period, from Alcester provides a good example of this. The deposit of leather off-cuts and general domestic rubbish must represent the sweepings from a leather workshop.[67] These were associated with a timber-building where the manufacture of shoes took place.[68] Evidence of leather working was found on Queen Victoria Street, London. In one structure there was a succession of working floors and upon one of these portions of leather survived, held down by pegs used to stretch it for cutting. Numerous other fragments of leather waste were also uncovered including parts of shoes.[69]

A simple building, located between the Bath gate and the amphitheatre at Cirencester, had a furnace and more than 2,000 hobnails scattered about the floor suggesting a shoemaker's workshop.[70] Excavations of a circular house at Quinton, Northamptonshire has also offered possible evidence of shoe making. Beside the building was a small hearth and in the surrounding yard 150-200 iron hobnails, mostly unused, as well as some small leather working knives were found.[71] Material such as this overlying a floor can be difficult to interpret, as it will normally appear after the floor ceases to be in use. However, it can be imagined that large amounts of hobnails, being small, would easily be lost or dropped during production.

4) Bone workshops

Although there is evidence of bone-working, even more than leather, this is confined to waste found in dumps. There would have been no need to import bone, as butchers would have generated enough raw materials to sustain the industry. Most of the remains consist of partially-worked pieces of bone intended for a variety of purposes, from the decorative parts of furniture to cosmetic items such as hair pins and combs. At Winchester in an early Roman ditch, just outside the west gate, waste products of a bone-worker's shop were uncovered. These included the rough-outs for pins, spoons, and

[67] Osborne, P.J. (1971) p. 164
[68] Mahany, C. (1994) pp. 14, 149, 159
[69] Grimes, W.F. (1968) p. 97; Merrifield, R. (1983) p. 104
[70] Wilson, D.R. (1975) p. 273
[71] Taylor, R.M. (1974) pp. 95-6; Wilson, D.R. (1975) pp. 253-5

possibly knife-handles.[72]

A similar deposit of bone-working débris was found at Butt Road, Colchester. Some of the objects were finished, others were damaged and unusable but the majority were unfinished. The articles were probably intended as applied ornaments on wooden furniture. If this does represent the dump from a workshop it is surprising to note the absence of other débris that would have littered the floor such as shaving, chipping and unworked offcuts. As they were probably intended to be used in furniture the deposit may have belonged to a joiner rather than a specialist in bone working.[73]

What may have been a workshop or dépôt for the makers of bone items was discovered in a room of the Wroxeter forum. The chamber was found to contain various animal bones and stag's horns, many of which had been cut and sawn. This may have been part of the worker's stock and been part of the preliminary preparation for the manufacture of pins, decorative inlays for furniture, knife-handles and other bone objects.[74]

5) Other workshops

A strip-building at Lower Brook Street in Winchester had a wide opening to the street and the existence of hearths and ovens indicate some industrial purpose. There was no evidence for metalworking and the absence of this may suggest the activity of cloth finishing of some sort.[75] In Chelmsford a modest timber-building was surrounded with several features that included a well, pits, hearths and a tile-built structure that may have been used to support two vats over a fire. The whole complex is thought to have been associated with dyeing or cloth finishing.[76] Blocks v and vi in *insula* xxix at Silchester may have been drying rooms for the cloth industry and been connected to the dye works in the north-west quarter of the town.[77] By virtue of the difficulty of detecting textile manufacture there is no indication of the scale of the activity or where it was produced, as

[72] Wilson, D.R. (1975) pp. 278-9
[73] Crummy, N. (1981) pp. 277-85; (1983) pp. 152-60
[74] Wright, T. (1872) pp. 151-2, 310; Liversidge, J. (1960) pp. 190-1
[75] Biddle, M. (1975) pp. 300-1
[76] Goodburn, R. (1976) p. 343
[77] Hope, W.H. (1909) p. 479

much of it could have been a 'cottage industry', but nonetheless there must have been demand for clothing manufacture.[78]

The best preserved hearth in Building 1 at Sapperton had two stone walls and a stokehole pit that retained some reddened ash, sheep bones and potash.[79]

6) Butchers

While those that lived in the country would have been largely self-sufficient in their dietary requirements, as they could have produced their own or have been close to supplies, those in an urban context may have had to resort to purchases from *tabernae*. The larger centres of population might have encouraged larger enterprises especially in food-production.[80] In some cases food would have required processing and there must have been establishments that prepared foods to be sold onto customers that will not survive archaeologically.

The quantities of meat bones that have been found on Romano-British urban sites indicate that the meat trade was extensive. There can be no doubt as to the existence of butchers, not only from the evidence of leather and bone-working industries, but more importantly from the method by which bones were cut during the preparation of the carcasses.

A series of pits was found in the south-west of *insula* ii at Cirencester both on the edge of the street and beneath internal floors. They were almost completely filled with cut and sawn animal bones, which suggests that they were associated with the preparation and sale of joints of meat.[81] These may imply the presence of butcher's shops or a meat market.[82]

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[78] Fulford, M. (1989) p. 190

[79] Goodburn, R. (1976) p. 326; (1979) p. 295; Simmons, B.B. (1976) pp. 5-11; (1995) pp. 162-4; Grew, F.O. (1981) p. 336; Rankov, N.B. (1982) p. 256; Frere, S.S. (1986) p. 390; (1988) p. 447; Burnham, B.C. & Wacher, J.S. (1990) pp. 304-6

[80] Richmond, I.A. (1966) p. 79

[81] Wacher, J.S. (1962) p. 9-11; (1995) pp. 306-7; Holbrook, N. (1998a) pp. 184-7

[82] The buildings in *insula* v give little indication of their function and from the prevalence of hearths and ovens it is reasonable to suggest that they had a strong association with food and drink. Given their prime position next to the commercial centre it could be suggested that they served as taverns, bakeries and the like to provide refreshment for those working and doing business in the nearby markets. Furthermore, they may have provided cooked meats that had been prepared across the street. Wacher, J.S. (1978) p. 212; (1995) pp. 306-8, 318; Holbrook, N. (1998) p. 209; Alcock, J.P. (1996) p. 78

Similar pits were found in the western and southern porticoes of the *macellum* at Wroxeter. These pits were found to contain animal bones, and at least one of them had a timber lining and cover. They are thought to have represented booths purveying food, possibly even hinting at 'sausage' manufacture in the portico.[83]

A clay-and-timber strip-building from Southwark in London was also associated with pits and middens containing large amounts of butchered animal bones.[84] A 'sausage factory' has been suggested close to the London gate at Verulamium (Figure 39).[85]

However, there are great difficulties in distinguishing food débris from deposits left by butchers or industrial processes concerned with animal products. Most parts of an animal can be eaten and can be found in waste from food consumption. Bones are rarely found in their primary contexts.[86] The identification is difficult as they frequently contain material from more than one source. If large joints or even whole carcasses are found this would suggest butchery and perhaps stock keeping on site.[87] In the case of Cirencester even though the bones were not fully studied one of the pits displayed clear evidence of butchery. The pits within shop 5 span a period of at least two hundred years that would require a significant continuity of function.[88] The context is not connected with a residential building and this may indicate its use in the commercial exploitation of meat rather than residential.[89]

Butcher's equipment such as flesh and meat hooks have been uncovered at London, Silchester and Verulamium, while knifes and cleavers are common discoveries.[90] Martial singles out the butcher as one of the major culprits for the invasion of the thoroughfares of Rome.[91] *Tabernae* with their large open fronts unprotected by windows and screens, and facing onto dirty streets, would have attracted flies. This would certainly have been the case for the butchers' shops, where animals were cut up for sale, and the streets would have

[83] Grew, F.O. (1980) p. 368; Rankov, N.B. (1982) p. 358; Frere, S.S. (1983) p. 303
[84] Burnham, B.C., Keppie, L.J.F. & Esmonde Cleary, A.S. (1996) p. 431; Drummond-Murray, J. & Thompson, P. (1998) p. 49
[85] Wheeler, R.E.M. & Wheeler, T.V. (1936) pp. 91-3; Wacher, J.S. (1978) p. 212; Alcock, J.P. (1996) p. 78
[86] Serjeantson, D. & Waldron, T. (1989) p. 3
[87] Platt, C. (1976) p. 56
[88] Holbrook, N. (1998) p. 187
[89] Serjeantson, D. & Waldron, T. (1989) p. 3; Schofield, J. & Vince, A. (1994) p. 192
[90] Manning, W.H. (1972) pp. 174-6; (1985) pp. 105-6, 109-13
[91] VII.lxi

been the dumping ground for the blood, bones and skins of carcasses.[92] Some of these bones could have been taken away by dogs as they did with corpses in Rome.[93] It is possible that many dogs in Roman Britain were little more than scavengers.[94] Butchers did use the streets as dumping grounds as is evident from the Digests.[95] Butchers and tanners were notorious offenders in matters of public hygiene and were banished in the later Middle Ages from towns.[96]

The cutting and selling of fresh meat would have been extremely difficult, as there were no refrigeration facilities in *tabernae*. This would have meant that there was a greater risk of deterioration and wastage of meat.[97] Despite such hazards, meat was evidently an important part of the diet, as is revealed by the large quantities of animal bones found on excavation sites. The analysis of bone assemblages has shown how wide a variety of species and meats were eaten.[98] This suggests different meat-eating habits and butchery in town and country under Roman influence.[99]

The practice of butchery was very different from the manner carried out during the Iron Age. During the Roman period chopping tools were used to separate the carcass and to divide it into joints.[100] This contrast in approach cannot be entirely explained by changes in tool technology. A distinction is more likely to have emanated when the killing and cutting up of the animal remains was concentrated rather than the animal being butchered when needed by those who raised them. This is evident from the nature of the bone deposits found on urban sites. The concentration of animal parts such as skull fragments

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[92] Scobie, A. (1986) p. 421
[93] Mart. 134.1
[94] Maltby, M. (1979) p. 64
[95] Dig. Papinian 43.10.1.5
[96] Platt, C. (1976) p. 47
[97] Columella in *de re Rustica* 12.55.4 recommends cutting pork into one-pound pieces as a means of preserving the meat. This is interesting as in many of the reliefs of butcher seems to be dividing the meat into sections such as that of the butcher's tomb originally from Rome but now in the museum of Dresden. Kempen, N. (1981) fig. 45; Veyne, P. (1987) p. 121. Salting, curing and smoking must also have been used for the preservation of meat. Cato De Agri Cultura 162; Columella *de re Rustica* 12.55; Juv xi.82-5; Pliny NH 31.87; Frayn, J.M. (1993) p. 146; van den Broeke, P. (1995) p. 153. Apicius l.viii; 1.ix.1-2; l.vii.i devoted a recipe to removing the salt flavour from meat preserved in this way. Many of the classical authors praise Gallic salted ham. Strabo, Geog., iv.4.3; Mart. Ep. xiii.54; Dioclet. Edict iv.8; Varro, Re Rustic., ii.4.10; Nenquin, J. (1961) p. 95 Regardless of all these efforts to preserve meat, and other foods, bad food must have been eaten.
[98] Davies, R.W. (1971) pp. 126-8, 136-41; King, A.C. (1984) pp. 188-97; (1999) pp. 168-202; Jackson, R. (1988) pp. 37-8
[99] Serjeantson, D. & Waldron, T. (1989) p. 4
[100] Maltby, M. (1989) p. 89

and limb extremities have been found in Silchester, Exeter and London suggesting centralized slaughter and an organized supply of animals.[101] The evidence of specialisation indicates that there was a market.[102] As for the possible exploitation of wild game, such as deer, hare and fowl the archaeological records show, especially in London, that during all periods, this was on a very limited scale and was never an important feature of diet.[103] This may be a testimony to the efficiency of not only the agricultural system but possibly that *tabernae* were adequately feeding the urban community and at the same time producing a surplus.[104]

7) Fish processing

A possible fish processing manufactory was located near Billingsgate in London. Inside a building a timber-lined drain connected to a large sub-surface tank was found. Within the drain a broken second century amphora was discovered that contained whitebait. This consisted of a local catch of about 84% young whole herring while sprat, individual bones of bass, flat fish and sea eels comprised the rest. All the fish were in immature stages and the mixture may have been used in the production of a local variant of fish sauce.[105] *Garum, hallec* or *liquamen* was a strongly flavoured fish sauce that was extremely popular in Roman cuisine and was added to almost every dish.[106] The nature of the surrounding gravel surfaces and drains precludes the interpretation of the structure as domestic. The location was also well suited for the processing of fish unloaded along the quays.[107]

8) Bakeries

Bread must have been an essential part of everyone's diet. Although there were large numbers of bakeries in Pompeii[108] there is little evidence for the production of bread in the *tabernae* of Roman Britain. As bread is an organic substance the lack of evidence is understandable but it is also quite possible that a great deal of baking was carried out on a

[101] Grant, A. (1989) pp. 140-1
[102] Maltby, M. (1979) p. 40; (1989) pp. 75 & 91
[103] Armitage, P., Davies, A., Straker, V. & West, B. (1983) p. 31; Parker, A.J. (1988) pp. 197-226
[104] Grant, A. (1989) p. 143
[105] Milne, G. (1985) pp. 29, 87-91; (1995) p. 108; Marsden, P. (1994) pp. 105-7
[106] These included meats, vegetables, fruit and even fish. Davis, R.W. (1971) p. 131; Curtis, R.I. (1979) p. 6 note 2.
[107] Bateman, N & Locker, A. (1982) pp. 205-7

domestic level.[109] It would only have been in the larger more extensive settlements that bakeries would have a sufficient customer base to survive. However, a few sites are thought to have been bakeries. In Southwark, London, a large quantity of charred processed bread wheat was found in a beam slot in one of the roadside buildings.[110] Similarly the activity of baking is indicated at Birchin Lane where a late first to early second century clay-and-timber building was discovered containing two ovens and carbonised grain.[111] A two-roomed timber building fronting onto Ermine Street was founded during the Flavian period in Godmanchester. Ovens lay to the rear of the building which was identified as a bakery. A large central hearth eventually replaced the ovens and this was associated with bone pastry-stamps.[112]

A large millstone of the Pompeian 'hour-glass' type was found in Prince's Street, London.[113] It was made of Andernach lava and came from the Rhine valley and was 0.53m tall. Levers that were inserted in sockets in its sides were used to turn it. Presumably it belonged to a miller or baker with a large enough operation to require such a fixture.[114] This was placed on a round conical platform, six of which were found in Silchester.

Building xviii.3 in Silchester is thought to have been devoted to flour-milling on a commercial scale (Figure 40). On either side of a long walled area were a series of three circular masonry platforms. These may have been used to support large querns similar to those found in Pompeii and that in London. Alternately they could have held a quern of the common discoidal shape like that found in *insula* xiv that is thought to have been too large for domestic use. The chambers to the west may have been used to store grain.[115]

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[108] Frayn, J.M. (1993) p. 60
[109] Schofield, J. & Vince, A. (1994) p. 122
[110] Burnham, B.C., Keppie, L.J.F. & Esmonde Cleary, A.S. (1996) p. 431; Greenwood, P. & Maloney, C. (1996) p. 18; Drummond-Murray, J. & Thompson, P. (1998) p. 49
[111] Heathcote, J. (1988) p. 382
[112] Burnhan, B.C. & Wacher, J.S. (1990) pp. 127-8
[113] Merrifield, R. (1965) p. 240 & pl. 106; Richmond, I.A. (1966) p. 79
[114] Birley, E.B. (1929) pp. 221-2; Morris, J. (1982) p. 212; Wacher, J. (1995) p. 68
[115] Hope, W.H. & Fox, G.E. (1898) pp. 113-20; Boon, G.C. (1974) p. 289; Alcock, J. (1996) p. 79

ii) Retailers

As was pointed out above the evidence for *tabernae* that dealt solely in retailing, rather then production, is more difficult to come by unless they sold commodities that are likely to survive in the archaeological record, such as pottery.

1) Retailers of ceramics

Part of one such *taberna* that sold both pottery and glass seems to have been discovered at Colchester, located in the south-west corner of *insula* xix. Originally it was thought to have been destroyed during the Boudiccan revolt, but based on the pottery contained within, has now been dated to the period of A.D. 50-55.[116] Within this building a deep deposit of imported broken pottery, glass and other wares were found. The entire stock probably ran to thousands of vessels, most, if not all, of which were imported. While a great deal of South Gaulish *terra sigillata* was found, the range was limited, as was the list of potters' names, several of which occurred in great numbers. Some sixty-seven stamps were found that indicated nineteen different potters. Fine glass that overlaid the *terra sigillata* was also plentiful. Although much of this was fused, enough remained to indicate that a number had been elegant vessels. The general impression gained from the deposit is that the *terra sigillata* had been piled on the floor or a lower shelf with the glass vessels placed on a shelf above. During the fire the shelves collapsed, and the glass had then melted and dripped over the broken sherds and finally the whole building collapsed, enveloping the merchandise.[117] What makes this find exceptionally interesting is that this *taberna* did not specialise in any particular item of ceramic but had a range of wares, and this may have implications for other commercial premises that sold more perishable goods. In general it does not seem to have been unusual for pottery shops to sell glass.[118]

A similar shop was also identified on the opposite side of the street in *insula* xxviii.[119] This small timber *taberna* was destroyed by the Boudiccan revolt. In this case the vessels were restricted to *terra sigillata*. The pottery within comprised 400 plain and

[116] Millett, M. (1987) p. 106; Rhodes, M. (1989) p. 53
[117] Hull, M.R. (1958) pp. 152-8; Liversidge, J. (1968) p. 186; Wacher, J.S. (1975) p. 110; (1978) p. 199; (1995) p. 120; Morris, J. (1982) p. 91; Crummy, P. (1988) p. 45, (1997) p. 82; Rhodes, M. (1989) p. 53
[118] Cool, H.E.M. & Philo, C. (1998) p. 360
[119] Wacher, J.S. (1975) p. 110; (1995) p. 120

decorated South Gaulish *terra sigillata* and a small quantity of Central Gaulish glazed ware. Some seventy-seven stamps were recorded and twenty-two potters were recognised. Various foodstuffs were also found implying that provisions including figs, barley, lentils, horsebean, spelt, stone-pine and coriander may have been sold alongside the pottery.[120]

At Castleford a row of five timber-shops belonging to phase 3 was excavated. These were situated in the *vicus,* some two hundred metres from the fort. As with the structures from Colchester these were destroyed by fire but in this case it seems to have been localised. The date of their destruction is thought to be A.D. 140-50. One of the strip-buildings (AL) contained large stocks of burnt pottery that included *mortaria,* plain and decorated Lezoux *terra sigillata,* some 200 decorated bowls and glass. There were approximately 700 vessels in total all showing signs of being burnt. The stamps of some 59 potters were represented on 416 of the vessels.[121] The quality and quantity of the pottery was surprising given the class of the building.[122]

In Corbridge, at site IV, a small timber-framed pottery shop was destroyed by fire in the late second century. The shop consisted of a small oblong room some 2.7m wide by 7m long and fronted onto the main east-west street. On the floor débris of charred wood, some coins, as well as masses of potsherds were uncovered. This pottery lay packed closely together and was not a chance deposit. It would seem that the pottery was grouped into three distinct sections corresponding to their character. These items appear to have been found in a manner consistent with a fall from a shelf. The first group comprised of grey- or drab-coloured courseware with some fragments of Castor ware, the second consisted of some thirty vessels of plain Lezoux *terra sigillata. Mortaria* seem to have been the main stock and the *tabernae* could be more properly called a '*mortarium* shop'. Some seventeen stamps belonging to eleven potters were legible on the wares.[123]

It is also likely that there was a pottery shop in Room 16 in *insula* xiv at Verulamium. This consisted of a large group of broken but almost complete vessels a high proportion of which included decorated wares. They probably fell from a shelf that

[120] Hull, M.R. (1958) pp. 198-202; Crummy, P. (1988) p. 45; (1997) pp. 82-3; Rhodes, M. (1989) p. 53
[121] Selkirk, A. & Selkirk, W. (1974) p. 307; Rhodes, M. (1989) p. 53; Cool, H.E.M. & Philo, C. (1998) p. 360; Abranson, P., Berg, D.S. & Fossick, M.R. (1999) pp. 17, 20, 298-9
[122] Sumpter, T. (1984) p. 84
[123] Haverfield, F. (1911) pp. 112-7; Forster, R.H. (1908) pp. 247-58; Richmond, I.A. (1943) pp. 144-6; Brassington, M. (1975) pp. 62-75

collapsed taking part of the wall that supported them. The débris was then possibly used in the repair of the wall and this would explain its existence on the spot undisturbed some 30-40 years after the event.[124] As well as *terra sigillata* imported glassware was also found.[125]

The variety of goods sold alongside *terra sigillata* seems to have varied according to local conditions. *Tabernae* positioned in the major centres of civilian population often sold a diversified stock; from the more elegant glass vessels, lamps, ceramic figurines, and fine ware found at Colchester *insula* xix, to the more general stores that sold pottery alongside provisions and possibly metal goods in *insula* xxviii. These shops were located on major roads or near the forum, and this would have been of paramount importance for *tabernae* that specialised and sold fine ware. Also within these towns were the general stores that sold pottery, provisions and metal goods that can be seen in other provinces such as at Cosa,[126] Kempten[127] and Magdalensberg.[128] Stocks of coarseware and other essentials may have been a feature of the *tabernae* that served the forts or small towns, as at Corbridge and Burghöfe, although decorated *terra sigillata* was not uncommon in these contexts, as Castleford would seem to indicate.[129] These finds would suggest that dealers were not restricted to any particular kiln site. While *tabernae* could sell more specialised items it is more than likely that the potters themselves or even itinerant merchants could also have sold coarsewares at fairs, markets and even door-to-door, but this would be difficult to trace archaeologically.[130]

It should be borne in mind that the difference between what can be termed a shop and a dépôt may be difficult to define. This is made even more strenuous by the lack of evidence for most trades and can only be hypothesised with a *taberna* that dealt with pottery and glass. It may not always be apparent from the design of the building itself, as the basic strip design of *tabernae* is a pattern that can be seen used in *horrea* buildings. Furthermore, goods were sold to individuals directly from warehouses, as was the case in

[124] Frere, S.S. (1972) p. 28; Rhodes, M. (1989) p. 54
[125] Branigan, K. (1987) p. 46
[126] Moeus, M.T.M. (1973) pp. 27-8; Dyson, S.L. (1976) pp. 115-36 ref. from Rhodes, M. (1989) p. 52
[127] Czysz, W. (1982) ref. from Rhodes, M. (1989) p. 54
[128] Mossler, (1969) pp. 417-22
[129] Rhodes, M. (1989) pp. 52-4
[130] Berry, B.J.L. (1967) p. 94; Hodder, I. (1974) p. 349; Peacock, D.P.S. (1982) p. 156; Rhodes, M. (1989) p. 49

Rome.[131] In Ostia *tabernae* often flanked the entrances to *horrea.*[132] The distinction possibly rests more on the quantity and diversity in storage. It is more than likely that a dépôt will have stored a larger group of single items. The major *horrea* complexes of Rome specialised in a single type of goods; the *horrea candelaria* stored only torches, candles and tallow; the *horrea chartaria* was consecrated to rolls of papyrus and parchments; while the *horrea piperataria* was used to store supplies of pepper, ginger and spices.[133] *Tabernae* would normally be situated near main roads or *fora* and even when there are important harbours pottery *tabernae* tended to lie in the town centres.[134] There is as yet little evidence of shops along quays. In Ostia temporary storage areas were along the Tiber bank.[135] So far pottery shops have been centrally located in the towns of Roman Britain such as at Colchester,[136] Corbridge[137] and Wroxeter.[138] However, *horrea* must also have played a part in the whole pattern of retail trade.[139]

2) Fish shops

Those *tabernae* that sold shellfish are more readily identifiable, especially when this was consumed on the premises. One such establishment may have been observed at Verulamium *insula* xiv during period IIC (Figure 5). In the portico, in front of Room 4, the equivalent of two buckets full of oysters were discovered suggesting that at this time the *taberna* was an oyster bar or fish-monger's.[140] A far greater amount of oyster-shells was found in shop 1 at the forum of Caerwent (Figure 41).[141] Some oysters in the *taberna* seem to have been unopened as both the valves remained in place. This further emphasises the possibility that this find was the stock-in-trade that was stored in the shop to be sold.[142]

[131] Rickman, G. (1980) p. 140; Milne, G. (1985) p. 71
[132] Rickman, G. (1971) pp. 19, 31, 63
[133] Carcopino, J. (1941) p. 177
[134] Dyson, T. (1986) pp. 200-1
[135] Meiggs, R. (1973) p. 275
[136] Hull, M.R. (1958) pp. 152-8, 198-202
[137] Brassington, (1975) pp. 62-75
[138] Atkinson, D. (1942) p. 129
[139] Rickman, G. (1980) p. 141
[140] Frere, S.S. (1972) p. 55
[141] Nash-Williams, V.E. (1953) p. 160; Liversidge, J. (1968) p. 39; Boon, G.C. (1974) p. 291; Wacher, J.S. (1995) p. 388
[142] Ashby, T., Hudd, A.E., & King, F. (1909) p. 579

However, recent excavations of the site seem to indicate that the original excavators in 1907 had not penetrated down to the Roman level. While these excavations seem to discount the possibility that this was once an oyster-bar they do confirm its use as a snack-bar throughout its history. The masonry hearth, gaming counters, personal items and lack of industrial finds would seem to support this.[143]

While the *tabernae* that sold shellfish can be identified, those that dealt in fish are more difficult due to their small bones. The sieving of soil samples allows some idea of the kinds of fish that were eaten and might have been sold. The archaeological records of London show that a wide variety of sea-fish such as cod, sturgeon, sprat, smelt, herring, mackerel, haddock and ling was available to the inhabitants of the town.[144] The freshwater species include eel, pike, roach and gudgeon.[145]

3) Grocery *tabernae*

There is little evidence for *tabernae* that sold fruit and vegetables but their existence is recorded on reliefs.[146] Products such as milk, fresh fruit and vegetables were presumably produced locally, while less perishable commodities such as olive oil, wine and preserved fruit products were transported over long distances in the Roman period.[147] The emphasis on environmental remains from urban sites has produced some promising results. Colchester has produced carbonised fig and date-stones that were presumably imported from the Mediterranean as well as wheat, oats, barley and flax.[148] A crate of cucumbers that was accidentally dropped in the river beside the quay was found in London. A variety of foreign fruits and vegetables have been found in the waterlogged sites of Roman London. These include walnuts, spices such as dill, coriander and fennel, plums and peaches. It can be seen that a wide variety of economic plants came into use for the first time in Roman Britain.[149] The limited remains so far can only point to their existence but not how they were distributed.

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[143] Burnham, B.C., Keppie, L.J.F. & Esmonde Cleary, A.S. (1995) pp. 330-1; (1996) p. 394
[144] Armitage, P., Davies, A., Straker, V. & West, B. (1983) pp. 29-30
[145] Hinton, P. (1988) pp. 431-3, 438; Marsden, P. (1994) p. 16; Milne, G. (1995) pp. 107-8
[146] Such as in Arlon, Luxembourge. Kempen, N. (1981) fig. 30
[147] Milne, G. (1985) p. 106
[148] Crummy, P. (1984) pp. 40, 105, 108, 110; (1988) p. 44; Wacher, J. (1989) p. 113
[149] Willcox, G.H. (1977) pp. 269-82

4) Bars/Restaurants

Eating and drinking are universal activities that serve fundamental human needs. Some form of tavern or restaurant must have existed in Roman Britain. The difficulty behind any identification of such buildings is that a structure and more especially a room dedicated to this purpose required little in the way of specific equipment and fittings. Public catering was merely the expansion and adaptation of domestic activity to those outside the family unit.[150] Such buildings may not be as obvious as those found in Pompeii and may only have been distinguished from ordinary dwellings by a sign.[151]

The existence of a possible snack-bar in the Caerwent forum/basilica has already been discussed above (see section ii.2).[152] In Building 1 *insula* I at Verulamium a 'wine shop' has been identified. This consisted of three rooms that opened onto the street through a veranda and a cellar. The small size of the building compared to the amount of storage space suggests that this was a shop. The identification as a 'wine shop' was due to the large number of amphorae fragments found.[153]

During the excavations at Bishopsgate, London, a great deal of vessels was discovered. As many of the sherds were from near-complete vessels, with a particularly large proportion of amphorae, it may be suggested that the assemblage was dumped in one operation. They did not originate from a warehouse as many of the items show obvious signs of use in cooking. The overall bias of the assemblage is towards food preparation rather then drinking, as the number of beakers in the find was low. Due to the size, composition and function of the assemblage it is more than likely that it was from the kitchen of a substantial private dwelling or perhaps even a 'cookshop'.[154]

iii) The Domestic Quarters

The identity of the business activities within a building can be difficult but the location of domestic spaces, such as kitchens and bedrooms is less predictable in small

[150] Treggiari, S. (1979) p. 75
[151] Thorne, R. (1980) pp. 228-30
[152] Burnham, B.C., Keppie, L.J.F. & Esmonde Cleary, A.S. (1996) p. 394
[153] Wheeler, R.E.M. & Wheeler, T.V. (1936) pp. 78-85; Niblett, R. (1987a) pp. 33-5
[154] Tyers, P. (1984) pp. 373-4; Davis, B., Richardson, B. & Tomber, R. (1994) p. 225

houses than in larger Roman buildings where clearer separation is the rule.[155] In general, there are few traces of the more utilitarian articles of everyday use that must have comprised the household equipment of the less well to do. Even in single roomed dwellings some demarcation must have existed between zones but this may be impossible to distinguish. It is only when there is more than one room that a distinction can be observed.

The contrasting role of rooms is often made clear by differences in their decoration. Decoration certainly had a role in reflecting the relative social and economic growth of individual *tabernae* but it equally illustrated the designated purpose of a room. The floor surface has a more pragmatic meaning than that of the walls. An individual must be able to move around it and place objects on it and variations in texture can give it a specific importance.[156] The introduction of mosaics, frescoes and other decorative features is significant, as they would hardly have been placed in a situation where they would potentially be exposed to damage, such as in a work area.

During the excavations of 175-177 Borough High Street, in London, a building with two rooms was discovered. The first room had painted walls the colours of which were part of a decorative scheme. The second room was much plainer with two coats of white plaster. Its function is unknown but the rooms must have had different uses.[157] In Building 1, Wolvesey Palace in Winchester the front room of a strip-building had a chalk floor and contained an oven and a series of hearths. This sparsely decorated room contrasted with the more elaborate decoration of the room behind. This had a floor of *opus signinum* and the walls were painted green, red and black with yellow and red stripes. It is likely that the front of this building was a workshop with living quarters behind.[158] This exact contrast can be clearly seen at Sapperton. While the workroom contained two substantial hearths and had a stone-flagged floor that to the rear had a mortar floor and painted plaster walls.[159]

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[155] Clarke, J.R. (1991) p. 25
[156] von Meiss, P. (1990) p. 126
[157] Schaaf, L. (1976) pp. 6-7
[158] Biddle, M. (1968) pp. 281-2; Wilson, D.R. (1968) p. 202
[159] Goodburn, R. (1976) p. 326; (1979) p. 295; Simmons, B.B. (1976) pp. 5-11; (1995) pp. 162-4; Grew, F.O. (1981) p. 336; Rankov, N.B. (1982) p. 256; Frere, S.S. (1986) p. 390; (1988) p. 447; Burnham, B.C. & Wacher, J.C. (1990) pp. 304-6

Some of the early shops at Cirencester had good quality frescoes on the walls of their back rooms.[160] To the back of shop V.2 the flue arrangement for a hypocaust and an *opus signinum* floor were discovered. The fragmented plaster from the room was painted in blue, green and red panels separated by white stripes. There were also yellow and white floral motifs and an attempt to imitate marble.[161] In the rear of shop VI.4 there was a mosaic floor in one room and another in a corridor. The room with the mosaic had painted walls.[162] At Verulamium, *insula* xiv, the use of *opus signinum* as a floor surface is largely confined to the rooms at the rear of the *tabernae*.[163] Decorated wall-plaster, *opus signinum*, mosaic floors and hypocausts all testify to residential occupation at the back of *tabernae*.[164]

While the presence of better quality wall finishes and floor surfaces points to a less utilitarian purpose, this contrasts with the discovery of a second to third century timber-building at Great Chesterford. This structure had cobbled and tessellated floors as well as painted walls. It also produced evidence for bone working that suggests that the work and domestic accommodation were combined.[165] It may also express how the function of a building could change over time, with finely decorated living rooms being converted into workrooms. A similar occurrence is thought to have taken place in Houses 11 and 12, *insula* 9, *regio* 1 in Pompeii.[166]

1) Kitchen areas

It is difficult to ascribe particular uses to individual rooms but there is evidence for possible kitchen areas.[167] The discovery of hearths in the rear of these buildings is just as significant as those placed in the larger front rooms. These hearths are often less substantial than those in the front, and it is presumed that they did not have an industrial function, but were used for heating or cooking such as in Newgate Street, London.[168] The detection of a kitchen area is one of the clearest indications of a residential occupation. Unfortunately, Italy has not provided a great deal of evidence for kitchens or even

[160] Wacher, J.S. (1962) p. 9; (1978) p. 89
[161] Holbrook, N. (1998b) p. 203
[162] McWhirr, A.D. (1978) p. 75; Neal, D.S. (1981) pp. 67-8; Holbrook, N. & Timby, J. (1998b) pp. 236-8
[163] Frere, S.S. (1972) pp. 41 & 56
[164] Holbrook, N. (1998b) p. 209
[165] Grew, F.O. (1981) p. 350
[166] Berry, J. (1997) pp. 103-25
[167] Liversidge, J. (1968) p. 264

fireplaces in the urban *insulae*. This is problematical as the *tabernarii* of Pompeii, Herculaneum and Ostia, like those in Britain are presumed to have lived in their *tabernae*. The evident lack of cooking facilities has led some to conclude that the humble Romans did not eat in their dwellings. The life of the community was lived outside their homes and the frequency of inns and eating establishments of various kinds would seem to support this conclusion and there was no need for formal kitchen areas.[169]

Even in more ornate buildings little attention was paid to kitchen arrangements. Separate kitchen units are rare in most Roman houses and when they are found they are located in a position that would least interfere with the activities of the rest of the house.[170] It has only been in modern times that the idea of a kitchen as an integral part of the house has been part of formal architecture. The absence of fireplaces in Italy may show that cooking was done on portable braziers. In contrast to Italy, hearths have been found in rooms of many Romano-British houses. This would imply that in the majority of cases, braziers or hearths would have been used for boiling, spit roasting or the baking of bread. In Britain and Gaul large cauldrons were occasionally used for cooking, suspended from the roof beams over an open fire.[171]

In the Walbrook valley, London, the floor surface of two buildings was covered with domestic kitchen refuse from food preparation. One was rich in oyster finds. A large amount of pottery was also found including a semi-complete sooted cooking pot that contained the skeleton of a chicken. Another vessel had a heavy build-up of lime scale, indicating that it was regularly used to boil hard water.[172] At Toppings Wharf the hearth found in the south of Building V and the small ones inside the northern part of Building III may have been used for cooking. Food and drinking vessels were numerous and a number of broken pots found on the site were covered with soot. The débris from eating and drinking could also be seen in the faunal remains scattered liberally about the site.[173]

2) Heating arrangements

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[168] Roskams, S. (1983) p. 406
[169] Packer, J.E. (1971) p. 73; Hermansen, G. (1974) p. 171; Jongman, W. (1991) p. 271
[170] Perring, D., Roskam, S. & Allen, P. (1991) p. 103
[171] Jackson, R. (1988) pp. 42-3; Alcock, J. (1996) p. 82
[172] Lees, D., Woodger, A., & Orton, C. (1989) pp. 116-8
[173] Sheldon, H. (1974) p. 13

As well as the preparation of food hearths may also have been used for heating.[174] In this role the hearth not only radiated heat, but also by its very nature would become the focus of that space and possibly the house. As a result, most of the communal activities of the household would take place around the hearth. The fire not only provided the basis for sustaining life but it also acted as a centre of communication as people gathered for warmth.[175]

Another method of heating was by means of braziers but their portable nature also made them very hazardous. A brazier could not heat a whole room but at least offered a comfortable heat to those that drew near. Scorch areas have been noticed on Romano-British mosaics several may have been created by braziers.[176] The long and continual use of a brazier damaged a *tesserae* floor in House xiv.1 in Silchester.[177] This emphasis upon domestic heating may be some what exaggerated as during the winters in Italy, people wore overcoats indoors and went to bed fully clothed, provoking some erotic poets to complain bitterly about lovers so cruel that they refused to take their clothing off in bed.[178]

3) Sleeping quarters

The most significant activity that took place in the residential area of a dwelling was sleeping. On average a third of someone's daily routine is taken up by sleeping but little evidence of this activity has been afforded by archaeology in Roman Britain. By contrast in Pompeii and Herculaneum there is good evidence for beds in the form of niches in walls and wooden-frames with mattresses.[179] As such the remains of what seems to have been a carbonised bed in Building 8, *insula* xxxvi, at Colchester is important. However, the use of this partially investigated building that was destroyed in A.D. 60/1 is uncertain.[180] The mattress may represent bedding piled out of the way during daytime. This would have meant that the room could have been utilised as a living room during the day and a bedroom by night. This also means that it cannot be assumed that floor space elsewhere in

[174] Jackson, R. (1988) p. 43
[175] Reid, M.L. (1989) p. 3
[176] In some cases fire places were built up against walls and these were long thought to have been evidence of squatters moving into the deserted buildings. This has been noted in Houses xvii.1, xxvii.1, xxxii.1 & 3 and xxxv.1 in Silchester. However, there is little evidence to support this conclusion.
[177] Hope, W.H. & Fox, G.E. (1897) p. 226; Boon, G.C. (1957) p. 157; (1974) p. 210
[178] Ovid, Art of Love II.300-2; Veyne, P. (1987) p. 315
[179] Dupont, F. (1994) pp. 150-1; Wallace-Hadrill, A. (1994) pp. 96-7, 113-4

this building was not used for this purpose.[181] Of course a wide variety of other materials such as skins, rugs and rush mats were also available for bedding that have not survived.[182]

4) Storage space

In many of the *tabernae* there would seem to have been a problem regarding storage. For the shops that restricted themselves to retail trade this may not have been a major dilemma, but for those that manufactured and sold their products there could have been a conflict of space. In a one-roomed enterprise, the proprietor had to contend with the problems of displaying items for sale, providing a work area and storage for raw materials but also living space. Confining the actual retailing to the region of the threshold and apportioning the remaining space in accordance with their priority probably solved this predicament. The use of shelving would also have produced extra space for storage but this is difficult to demonstrate archaeologically although it is presumed in many pottery shops (see section ii.1).

Room 55 at the rear of a shop in *insula* xiv at Verulamium was probably a storeroom. This contained a large quantity of artefacts that include whole or partly broken pots, lamps, some flagons, pieces of iron work and twelve small crucibles and other items. The items may have been stored on a shelf that was inserted into the wall. The location at the rear of the *taberna*, the lack of a furnace and the number of items suggest that this may have been a storeroom.[183]

5) Domestic Worship

Despite the limited space within the household region of the *tabernae* there is some evidence for domestic worship. This only further emphasises the importance of domestic worship and its significance to the inhabitants of Roman Britain. In Italy they often consist of simple niches in a wall.[184] As the walls of houses seldom survive to any great height niche shrines have not been found in Britain. However, other types of shrines are known to have existed in Pompeii and Herculaneum the remains of which are thought to have existed

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[180] Wilson, D.R. (1973) pp. 302-4; Crummy, P. (1984) pp. 42-7; (1988) p. 45
[181] Giddens, A. (1985) p. 274; Smith, R.F. (1987) p. 112; Wallace-Hadrill, A. (1994) p. 97
[182] Liversidge, J. (1955) p. 54; (1968) p. 151
[183] Wilson, D.R. (1961) p. 180; Frere, S.S. (1961) p. 75; (1972) pp. 80-1

in Britain.

In Room 31, *insula* xiv, at Verulamium there was a small tile-built structure against the north-west wall during period IIC (130-150 A.D. Figure 5). A similar structure was placed beside it in period IID (150-155 A.D. Figure 6). Both seem to resemble cupboards that were open to the front. The units may have been used for the safe keeping of valuable or even sacred articles.[185] Permanent fixtures such as these are rare in Roman Britain, and have in most instances been interpreted as a household shrines. In design the Verulamium example may have functioned as a *lararium* similar to those found in Pompeii and Herculaneum. These consist of cupboard like structures that stood on a *podium* in the main room of the house.[186] It was used to contain, and provide a setting for, the statuettes of the gods, as similar modern European Christian shrines do today.[187]

House xxxiv.1 in Silchester was a large house that was possibly involved in the tanning industry (Figure 39). This had a semi-detached room located in the courtyard and these are frequently thought to be *lararia.*[188] Site VI, *insula* viii, at Wroxeter was a courtyard house formed by the amalgamation of three earlier shops. Room 31 jutted out into the courtyard and it is probable that this was a *lararium.*[189] Of more interest were the late first century deposits found below the house. These consisted of two fragments from an *aedicula* with an arched niche to contain a statue that may have been set up in one of the early shops. A similar shrine to this has been found in Carden on the Moselle valley.[190] The location of the building north of a temple shows an interesting mix of both public and domestic religion on the *insula.* What may be of more significance is the possible continuation of practice of domestic religion from the original strip-shops to the more elaborate courtyard house. Beneath House 2A, which was succeeded by House iii.2, at Verulamium were two pits containing ash and several lumps of molten glass suggesting glass manufacture. Part of a plain stone domestic altar was also found.[191] The owners of

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[184] Boyce, G.K. (1937) pp. 10-2
[185] Frere, S.S. (1960) p. 9; (1972) pp. 57-60; Wacher, J.S. (1995) p. 240
[186] Petronius Satyricon 29: This was the first thing that caught Escolpius' eye when he entered the house of Trimalchio. Boyce, G.K. (1937) pp. 12-4; Oglivie, R.M. (1969) p. 101; Boon, G.C. (1983) pp. 33-6
[187] Orr, D.G. (1978) p. 1577
[188] Hope, W.H. (1907) p. 433
[189] Bushe-Fox, J.P. (1916) pp. 2, 16-7
[190] Bushe-Fox, J.P. (1913) p. 18 fig. 10; Wacher, J.S. (1995) p. 373; White, R. & Barker, P. (1998) p. 81
[191] Wheeler, R.E.M. & Wheeler, T.V. (1936) p. 93

these buildings may have felt that their commercial success was due to their worship of the household cult.

At the rear of a shop belonging to Building XII at Housesteads a shrine consisting of two flagstones was uncovered. Across the front was a stone relief of three *Genii Cucullati*.[192] A *lararium* in the form of a dry stone plinth has also been identified at room 2 in the rear of a three-roomed strip building at Chelmsford.[193] In London's Watling Court, there is evidence that points to a more or less permanent fixture within two rooms of a mudbrick-building. At Building F, in rooms vii and ix, clay bases were excavated that possibly supported free-standing units. The object in room ix had projecting arms from the wall in a similar fashion to those found in Verulamium *insula* xiv. Both were located in central positions and must have been the principal features within those rooms. However, it is difficult to justify two shrines in adjacent rooms. Perhaps the two rooms marked the division between two separate living spaces. [194]

Every household probably had its own shrine and the *lararium* was probably a feature of almost every Romano-British dwelling, although the majority would probably have been wooden cupboards, niches and shelves upon which the statues could be arranged, rather than a substantial architectural element.[195] This occurrence would be the simplest explanation as to why a focus of domestic worship has not been identified in many of the modest houses. Furthermore, there are many examples of portable shrines in Pompeii that show worship on an even humbler scale.[196]

It seems that some form of Roman domestic worship had reached Roman Britain. In all cases the shrines to the household gods appear within the residential areas of the *tabernae* of Pompeii.[197] Although the *lararium* is ubiquitous in Pompeii no two niches are the same as they differ greatly in execution and decoration.[198] Enough has been preserved in Ostia to show that *tabernae* were not normally equipped with niches when they were built.[199] The existence of such shrines possibly indicates the need of the inhabitants to

[192] Boon, G.C. (1983) p. 38
[193] Drury, P.J. (1975) p. 165
[194] Perring, D., Roskam, S. & Allen, P. (1991) p. 99
[195] Allason-Jones, L. (1989) p. 144
[196] Orr, D.G. (1978) pp. 1576-7
[197] Foss, P. (1997) p. 206
[198] Orr, D.G. (1978) p. 1577
[199] Bakker, J.T. (1994) p. 183

define their own dwelling as an independent household with their own cult.[200] Of more interest is their location at the rear of the dwellings of Roman Britain. In this instance, it does not express a superficial acceptance of Roman domestic religion to the world in general, but a private and very personal acceptance of romanization.[201] Regardless of whatever form it took the worship of the household deities was used to ensure the prosperity and welfare of the family.[202] Hence, its location in what must have been the residential quarters of commercial premises is understandable.

Discussion

There can be little doubt that buildings express social meanings through their appearance and building interiors have better defined differences in the relation of space than outside. The ordering of space within buildings essentially concerns the ordering of relations between people. The exterior space was where society was produced and the interior space was where it was reproduced.[203] Roman domestic architecture was a product of social values. It was a constructed space and reflected the social system that created it.[204] The ways in which it was organised and manipulated can reveal a great deal about its inhabitants.[205] The arrangement of rooms in the *tabernae* may seem quite alien to the modern observer, who is more accustomed to a clearly delineated division between the home and a place of work. Unlike the majority of post-industrial society, the Romans did not attempt to divorce their living space from that of their labour. This organisation of space can be seen at its simplest level in *tabernae*. It was not simply confined to the lower strata of society but permeated the whole of it from the humble *tabernarii* to the social élite.[206]

Hillier & Hanson's studies have pointed out that 'a building consists of a set of well-defined spaces with well-defined links from one to the other'.[207] Therefore the

[200] Wallace-Hadrill (1994) p. 110; Pirson, F. (1997) p. 168
[201] Alcock, J. (1986) p. 129
[202] Alcock, J. (1986) p. 115
[203] Hillier, B. & Hanson, J. (1984) pp. 2-20
[204] George, M. (1997) p. 15
[205] Scott, E. (1990) p. 152
[206] Wallace-Hadrill, A. (1988) p. 56, (1994) p. 12
[207] Hillier, B. & Hanson, J. (1984) p. 16

contrasts in internal space are directly related to the ways in which a particular society creates and controls encounters. *Tabernae* were continually influenced by social factors such as the needs of trade or the contrasting desire for living space and higher standards of living. This division between a work and residential quarter of the *taberna* can be seen in terms of architecture, but it was also reflected in a more subtle social segregation. While discussing the arrangement of house plans, Vitruvius draws a clear distinction between what he calls the 'private' rooms for the family and those designated as 'public,' for the entertainment of visitors.

> The private rooms are those into which no one has the right to enter without an invitation, such as bedrooms... The common are those which many of the people have a perfect right to enter without an invitation... [208]

This should not be seen as a rigid and inflexible division between a place for the family and one for visitors in any modern sense that places a greater emphasis upon privacy. Vitruvius is speaking of houses in terms of different degrees of ease of penetration by outsiders, between a space for invited and uninvited visitors.[209] Every building selects a number of 'visitors' who are persons who may enter the building temporarily but not control it. They may have a legitimate reason to cross the boundary, but it will always be less than that of the inhabitants, in that they have no control over the building.[210]

A similar occurrence can be observed in the plan of '*taberna*-dwellings'. In the *taberna* the division of the differing regions can be divided between areas of public activity and business, which focused around the shop counter that existed on the threshold or in the front room, and the private regions of the less accessible rooms behind. However, it should be noted that during the Roman period we are not dealing with spacious shop premises, that in the modern sense are capable of welcoming large groups of customers into their inner recesses. The retailing area would certainly have been the space for uninvited guests where they had easy access, but entry to the back rooms could only be gained from the inside. The rear room would seem to have been both private and secure, where personal items could be stored, and suitable for the individual members of the household to sleep in.[211] In

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[208] VI.v.1
[209] Wallace-Hadrill, A. (1988) pp. 81-4; (1994) pp. 44-7
[210] Hillier, B. & Hanson, J. (1984) p. 146
[211] Hingley, R. (1990) p. 132

the most private back regions there are often found the most intimate and private household interactions and rituals.[212] The bedroom was probably the most private of the domestic rooms. The words of St Augustine reveal the profoundly intimate nature of the *cubiculum*. Several times in the *Confessions* he uses metaphors that show the bedroom to be the most secret and personal of all rooms in the house.[213] It was here that the prevailing morality was most shockingly transgressed and violated. According to Apuleius the opening of the bedroom to strangers was seen as the symbol of debauchery.[214] When it was transgressed the bedroom was a place of adultery, incest and unnatural intercourse.[215] Despite the profoundly private nature of the bedroom is was customary to receive relatives and people sent on the recommendations of friends and relatives in bedrooms.[216]

The Roman house, regardless of status, seems to have been obsessively concerned with distinction of social rank through the layout of rooms.[217] The language of spatial analysis is very sexual in its use of vocabulary but like intercourse for the Romans the fundamental concern was to protect the integrity of space and to distinguish between the active (penetrating) and passive (penetrated) roles. The primary concern was not the action of the individual but rather the status of the individual and this would determine the extent of access.[218]

The separation of 'public' and 'private' areas was not only based upon clear physical division of walls and rooms but also on a more vague conceptual one. Any person entering a house or *taberna* would be confronted by a number of successive signs. One of the great difficulties with the concept of two distinct zones within the dwelling is that it is literally seen as a rigid contrast of bi-polar extremes. However, this may have been the case in the simple *tabernae* that consisted of two chambers. Although Vitruvius's discussion is uninterested in the dwelling of the humble this explicit dual division between public and private does not seem to reflect reality. It is likely that Vitruvius was not looking upon the dwelling in a literal sense but was describing what his intended readers already knew. What existed was a spectrum that spanned the totally public to the totally

[212] Blanton, R.E. (1993) p. 11
[213] VIII.8; XII.16.
[214] Apol. 75
[215] Metamorphoses IX.20-30, X.3-5, 20-23
[216] Metamorphoses I.23; Thébert, Y. (1987) pp. 378-9
[217] Wallace-Hadrill, A. (1994) p. 10

private and the layout of the household and decoration attempted to establish the relatives along the spectrum.[219]

The social function of decoration was the associations it invoked. The greater the depth an individual penetrated the house the higher the prestige of the room. There was a fabric of distinct but overlapping hierarchies. In this way the issue for someone progressing through the house was not the literal identification of the activities within the physical space but how these functions were guided through the dwelling. The decoration then underlined the distinctions that extended to the use of space. The area of business existed around the *taberna* entrance while the private areas could only be reached by passing through the various barriers, such as the doorway, counter and hearth. Hence, the outsider would follow a path inward through the entrance and then into spaces normally devoted to formal guest entertainment.[220] Equipped in this way both architecture and decoration co-operated to enhance the increasing impression of privilege and intimacy into the area most secluded from the front door and shop floor.[221] The arrangement and decoration of any Roman dwelling displayed the social status of the owner and served the needs of their station in life. While for the élite the building reflected wealth and position for the lower orders it emphasised social ambition.[222]

As houses are the dwellings of people few will fit the ideals of space. This is especially true of smaller houses, which enlarges the concept of space away from prescribed towards the notion of habitual use.[223] Most buildings are far from being monofunctional and the *taberna* exemplifies this by being part dwelling and part place of work. A room may not have a single defined role but can be zoned differently in time as well as space. The area designated for retailing and manufacture was probably most used during daylight hours, while the back was where individuals retired to at night.[224] Building design was not simply for one purpose but expressed the interdependence of parts within a system, but even here the function was the primary and obvious consideration. The provisions made for such dwellings influence the structure, plan, services, access and

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[218] Clarke, J.R. (1998) pp. 85-6, 94
[219] Clarke, J.R. (1991) p. 367; Wallace-Hadrill, A. (1994) p. 17; Tybout, R.A. (1996) p. 368
[220] Blanton, R.E. (1993) p. 11
[221] Wallace-Hadrill, A. (1994) pp. 25-50
[222] George, M. (1997) p. 16
[223] Clarke, J.R. (1991) pp. 363-4

means of movement in and around the building.[225] This all took place under the constraints of space and resources. Large and well-decorated rooms are generally assumed to reflect the reception of guests in the houses of the élite. In *tabernae* the average house space was more modest and the decorative and architectural elements were simplified or of a lower quality.[226] A corollary of this is that the language of form and decoration even at a very modest level was dictated by the needs of the dominant social class.

It would seem that the inhabitants of the *tabernae* of Roman British were playing the game of contact with others in a similar fashion as those in Italy. Whether they were merely mimicking what they observed or truly understood its significance is another matter. They must have had some comprehension of this domestic power game or else they would have ignored it.[227] Roman Britain was a multi-cultural society and any racial mix, irrespective of tribal influences, was the result of the impact of cultural values from the Mediterranean filtered through north-western Europe. The use of houses in a more romanized way required not only the adoption and development of the architectural form but also an acceptance of the associated ideology not only by those who owned the dwellings but also by those who were to be impressed by it. Instead of finding a unitary vision of domestic space that would characterise the province, the realities of a complex, multi-cultural society would suggest that there were several overlapping and competing views of domestic space.[228] The Romano-British population seem to have been increasingly drawn into an unprecedented complex social world. The modifications in the use of space and the ever-developing taste for decoration not only suggest economic change but also far reaching social alterations.[229]

Even in this brief analysis it can be seen that there is much more to the division between public and private activities than might appear in *tabernae* by the seemingly mutually exclusive nature of these categories.[230]

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[224] Giddens, A. (1985) p. 272
[225] Farmer, B. (1993a) p. 163
[226] George, M. (1997) p. 20
[227] Wallace-Hadrill, A. (1994) pp. 52-61
[228] Alston, R. (1997) p. 39
[229] Scott, E. (1990) pp. 168-9
[230] Giddens, A. (1985) p. 278

Summary

The importance of a study of room usage and function is obvious, as it is only through the knowledge of room function that social judgements can be inferred not only for the structure under scrutiny, but the much wider surrounding community. At the simplest level these *tabernae* are believed to have performed a dual function, where the frontage was dedicated to retailing or manufacture while those to the rear were assigned to largely residential use. The weight of the archaeological evidence points to the industrial function of these buildings and less heavily to the retail purpose. Examples of retail *tabernae* do exist in the form of pottery shops but how representative they are will never be known. There must have been many *tabernae*, especially those involved in the service trade, but evidence of their existence does not survive. The bias will always remain with those *tabernae* that have left clear archaeological traces. Although the purpose of the rooms that lay to the rear is less easy to define to specific uses they presumably hosted the whole range of domestic activities. Even if there is a difficulty in identifying the exact function of rooms in the *tabernae* their number and variety may be significant in itself.[231] The low standard or complete absences of what are thought to be basic facilities, notably arrangements for cooking, heating and sleeping could be seen as a health hazard through modern eyes but were probably adequate. Only the wealthy could afford separate kitchens and private latrines, and most people managed with considerably less.[232] In any room where cooking took place the same space was probably utilised for domestic activities such as eating, living, sleeping, defecation, domestic chores and even working. In the smaller *tabernae* a single room would have served, as a shop by day but, after closing it became a kitchen and shared living space.[233]

In this general study of *tabernae* internal arrangements it would seem that the shops of Roman Britain emulated many of the spatial conventions that existed in other parts of the Empire. As a result it would seem probable that the *tabernae* adopted many of the social divisions that existed in Roman houses. Despite the difficulties encountered in Britain, the room function of many shops followed the divisions, both structural and social, found in

[231] Blagg, T. & Millett, M. (1990) p. 195
[232] Jackson, R. (1988) p. 42
[233] Dupont, F. (1992) p. 151

other regions of the Empire, although there may always have existed a degree of local variation.

Chapter V

Retail Geographical Location

The most basic decision for any retailer is where to locate their premises. It is a popular maxim that for real estate agents the three most important considerations when choosing a site is location, location and location. This is the case for every dwelling but it is exceptionally important for the modern retailing outlet as the locale of a shop could dictate whether an enterprise will succeed or fail. Therefore, the study of *tabernae* or any structures should not simply be concerned with the plan and physical composition of the building. The position of buildings within a settlement is intimately connected to the social, political and economic organisation of that community. The approach adopted relies on an interpretation of *taberna* land use patterns in the towns of Roman Britain and the manner in which the retailers adapted to their urban and commercial environment. The reasoning behind this is that the different land uses over the settlement may represent a physical assertion of the economic and social attitudes of the retailers located within the urban space.

Although a great deal of excavation work has been carried out on the towns of Roman Britain the urban landscape, with regard to building location, has seldom been subject to detailed analysis.[1] The analysis of location factors is fraught with many difficulties as the rationale for choosing a site can be influenced by numerous factors that are often not at first apparent. Despite this geographers have formulated numerous theories over the past decades to give probable explanations for the development and layout of any settlement. The intention here is to apply relevant urban geographical techniques of analysis to the study of Roman Britain. Similar work to this has already been successfully applied to Pompeii by Raper as it offers the most complete ground plan of any Roman town.[2] Although his work is now considered less reliable due to the poor knowledge of Pompeian archaeology his approach was pioneering.[3]

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[1] Dark, K. & Dark, P. (1997) pp. 114-5
[2] Raper, R. (1979) pp. 137-9
[3] My thanks to Prof. John Bintliff for pointing this out. Personal e-mail <john@rulpre.leidenuniv.nl> 27 Feb. 2000.

While modern settlement analysis has its complications, that of ancient societies is even more difficult as the buildings have long since been destroyed, their probable function has to be conjectured and their relation to other structures can be indeterminable. Shops are principally classified by the kinds of goods they sold and this has a large part to play in modern location theory but in the case of the Roman world this is largely unknown. The case for Roman Britain is even more enigmatic as few of the larger sites have been excavated in their entirety due to the restrictions of modern settlement and finance. It is important to note that while geographers can study an entire settlement pattern this is not possible for the archaeologists who must work with the traces of it that survive.[4] As a consequence most of the material for *taberna* location analysis in Roman Britain must draw largely from the excavations of the towns of Silchester and Caerwent as these sites have been largely uncovered and the resultant plans allows some analysis of the wider townscape.

The limitations of these settlements is that when the excavations were carried out about a century ago little knowledge or attention was afforded to timber structures. Furthermore, the buildings under discussion probably date to the later part of the Roman period and while they represent the developed settlements interpretations concerning earlier periods cannot be drawn.[5] In Silchester the *tabernae* are thought to belong to the new street development and the older wooden ones may have been obliterated during the remodelling of the town.[6] This brings to light one of the intrinsic difficulties with theories on the structure of town layout in that they are concerned with the townscape at a particular moment in time, normally the latest phase, and lack any historical depth. This is also the case in what are considered well understood sites such as Pompeii. This means that the factors that surrounded the initial foundation of the town that may have had a profound effect on the manner in which groups of individuals took up their residence will often be unknown. Furthermore, recent excavations of House 1 *insula* ix at Silchester have shown that the original Victorian excavation plan was oversimplified and that the building was far

[4] Rouse, I. (1972) p. 97
[5] Walthew, C.V. (1987) p. 201
[6] Berry, C.A.F. (1951) pp. 30-1

more complicated then first thought.[7] The town plans of Caerwent and Silchester are problematical but they are the most extensively excavated.[8]

The retailing industry, far more than domestic living, was in a constant state of change and adjustment.[9] While this is a problem of interpretation on a micro level it is amplified on the wider macro level. Additionally, a settlement that originated by 'natural growth' may be fundamentally different in layout to one that was deliberately imposed at a particular moment in time.[10] In the same manner a distinction can also be made between planned and unplanned retail areas. The latter is one that has developed through a progressive and gradual evolution, habitually through the transformation of buildings and sites originally designed for some other use.[11] Planned developments can take place within unplanned areas but taken as a whole this is small in relation to the entire retail zone that essentially remains unplanned. In general, most central shopping areas in cities, towns and settlements constitute predominantly unplanned retailing.[12]

Inevitably almost every type of building can be found on any site but here the interest is in the broader trends of land-usage of towns. Of course each settlement is unique in the combination of the features of urban land treatment but there would still seem to have been a general degree of order underlying land use.[13] Not withstanding these problems and the lack of widespread investigations of other sites in Roman Britain some interpretations can be made concerning *tabernae* location by relating these to other features and by analogy to Caerwent and Silchester. Further aids to this study can be made by comparison to Pompeii where similar studies on a wider urban level have been carried out.

According to the 1980 study carried out by Guy on 'Retail location and retail planning in Britain' based upon the earlier work carried out by Nelson in 1958 there are three types of business that a retailing outlet can engage in; 1) generative trade 2) shared

[7] Burnham, B.C., Keppie, L.J.F. & Esmond Cleary, A.S. (1998) pp. 426-7; (1999) p. 369; Fulford, M. & Clarke, A. (1999) pp. 178-80
[8] Esmonde Cleary, A.S. (1989) p. 75
[9] Kivell, P.T. & Shaw, G. (1980) p. 129
[10] Collis, J. (1984a) p. 123
[11] Guy, C. (1994) pp. 96-8
[12] Guy, C. (1994) pp. 11-2
[13] Raper, R.A. (1977) p. 197

business and 3) suscipient trade. This is assuming a generality of location irrespective of social and historical contexts.

i) Generative Trade

It would seem that the distribution of *tabernae* in Roman Britain makes complete sense topographically. As in modern retailing there are several types of business that a *taberna* can be involved in and the simplest of these are generative. Generative trade is that which is produced by the shop itself. The *tabernae* that relied upon this form of business would probably have been located in a position that was easily accessible for consumers. They do not necessarily need to be adjacent to other shops although it does happen, as fellow retailers will also be attracted to arterial routes for the same reasons.[14]

The major roads of the larger towns normally lead directly to the market area of the settlement that would have been focused upon the forum. Some of these were extensively used as they show evidence of being heavily worn and had patched or replaced paving.[15] The forum would have housed rentable shops and temporary booths but despite these facilities independent *tabernae* owners would have wished to locate themselves as closely as possible to the market and commercial nucleus. The core of Silchester is fairly typical of a town in Roman Britain with retail buildings surrounding the forum (Figure 42).[16] The *insulae* i, ii, iii, v, vi, ix and xxi surrounding the Silchester forum contained rectangular buildings,[17] some of which were interpreted as *tabernae* and 'lock-up shops'.[18] In the strip of land to the east of the forum there was a small oblong house with five rooms, four of which were given over to retailing, one at each corner, and this may have been one of the latter establishments.[19] Another may have been in the north-west corner of *insula* vi. If these were lock-up shops it would emphasise a further development of the growth of a specialised vending area taking place autonomously from residential and public use.[20] This

[14] Guy, C.M. (1980) p. 45
[15] Esmonde Cleary, A.S. (1989) p. 123
[16] Blagg, T.F.C. (1991) p. 10
[17] Fox, G.E. & Hope, W.H. (1892) pp. 264-74, 280-3; (1893) pp. 561, 569-70; Fox, G.E. (1895) pp. 444-50; Hope, W.M. & Fox, G.E. (1900) pp. 229-30; Hope, W.M. (1906) pp. 150-6
[18] Boon, G.C. (1974) pp. 54-5, 188
[19] Fox, G.E. & Hope, W.H. (1893) p. 562
[20] Carter, H. & Lewis, C.R. (1990) p. 94; Guy, C. (1994) p. 98

is significant as the usual *taberna* design catered for both domestic and retail activities under one roof. The strip-buildings along the main street of Caerwent were also close to the forum (Figure 22).[21] Further possible *tabernae* can be found to west and north of the forum at Caerwent.[22] The excavated shops belonging to *insulae* v and vi at Cirencester were located just to the south of the forum and adjacent to the *macellum* (Figures 8-9).[23] The row of *tabernae* along the northern part of *insula* xiv at Verulamium were found to be in an equally advantageous site as the *insula* lay on Watling Street and between the forum basilica and the theatre (Figure 1).[24] Many of these *tabernae* must have met the service requirements of the forum as well as making general sales.[25]

As expected *tabernae* would tend to cluster together on the main thoroughfares and principal roads of the towns and settlements and then thin out and disappear towards the periphery.[26] In this location they would naturally have occupied what would be the most desirable and commercially advantageous site in any built up area.[27] In an attempt to find a location close to the centre commercial premises would have been very competitive in their demand for space (see Chapter III.i).[28] This can be clearly seen at Caerwent where the main east to west street was bordered by closely packed strip-buildings that were only interrupted by the forum, baths, and temple.[29] Several rectangular buildings and at least one clearly identifiable shop can also be found along the route from the north gate to the forum.[30] *Insulae* i, ii, ix, x, xi, xiii, xiv, xxi, xxvii and xxix along the main line of the east-west roadway to the centre of Silchester contained numerous and at times closely packed

[21] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 7-20; (1911) pp. 421-43; Nash-Williams, V.E. (1930) pp. 229-31; Liversidge, J. (1968) p. 75
[22] Ashby, T., Hudd, A.E. & Martin, A.T. (1904) pp. 113-4; Ashby, T. (1906) pp. 125-8; Ashby, T., Hudd, A.E. & King, F. (1909) p. 569
[23] Wacher, J.S. (1962) pp. 9-11, (1995) pp. 318-9; McWhirr, A.D. (1978) pp. 73-7; Holbrook, N. (1998b) pp. 189-210; (1998c) pp. 217-30; Holbrook, N. & Timby, J. (1998) pp. 230-45
[24] Frere, S.S. (1958) pp. 4-9; (1959) pp. 3-10; (1960) pp. 6-12; (1961) pp. 72-5; (1972) pp. 1-103; Blagg, T.F.C. (1991) p. 10
[25] Raper, R. (1977) p. 196
[26] Wallace-Hadrill, A. (1994) pp. 127-8
[27] McWhirr, A. (1981) p. 37
[28] Freeman, T.W. (1958) p. 112
[29] Ashby, T., Hudd, A.E. & Martin, A.T. (1902) pp. 147-51; Ashby, T., Hudd, A.E. & King, F. (1910) pp. 7-20; (1911) pp. 421-43; Nash-Williams, V.E. (1930) pp. 229-31; Liversidge, J. (1968) p. 75
[30] Ashby, T., Hudd, A.E. & Martin, A.T. (1904) pp. 96-7, 104

street frontages of strip-buildings of a similar character.[31] The few domestic buildings excavated in Wroxeter that were identified as *tabernae* in *insula* viii (Figure 14) were located on the main north-south street south of the forum.[32] Further possible strip-building along both sides of this road are evident from aerial photographs. *Insula* vi that was placed along the main north-west to south-east route of Cirencester contained several strip-buildings.[33] Strip-buildings were also found along the main arterial routes of Exeter[34] and Winchester (Figures 43-44).[35]

This is a feature that can be clearly seen in the smaller towns, due to the absence of *fora* buildings, such as Castleford where the principal road was lined with *tabernae*.[36] At Water Newton the sides of Ermine Street were also lined with strip-buildings at right angles to the street with associated kilns and furnaces for potting and metalworking (Figure 45).[37] Observations from aerial photographs and minor excavations indicate that the main streets of Corbridge were lined with strip-buildings (Figure 46).[38]

Street corners, crossroads, junctions or where people were forced to converge were also popular places for *tabernae* as in this location the retailer could maximise the customer base from a number of roads. At the junction between two roads at Aston was a building that contained five furnaces and a great deal of iron slag. This manufactory not only had the advantage of being on a road junction but it was also on a crossing of the river Nene.[39] Southwark also occupied a position close to a bridge but this was into the city of London.[40] The settlement contained numerous buildings that offered evidence of their commercial nature.[41] It can be seen from Pompeii, Herculaneum and Ostia that taverns could usually be found at places where there would have been the most passers-by and especially at street

[31] Fox, G.E. (1892) pp. 164-74; (1895) pp. 444-59; Hope, W.H. & Fox, G.E. (1896) p. 216-7; Hope, W.H. & Fox, G.E. (1900) pp. 229-30; Hope, W.H. (1908) p. 200; (1909) pp. 477-9; Boon, G.C. (1974) p. 96; Walthew, C.V. (1987) p. 227; Blagg, T.F.C. (1991) p. 10
[32] Bushe-Fox, J.P. (1913) pp. 5-23; (1914) pp. 1-9; (1916) pp. 4-20
[33] McWhirr, A.D. (1973) pp. 191-218; (1978) pp. 73-7; Holbrook, N. & Timby, J. (1998) pp. 230-45
[34] Bidwell, P.T. (1980) pp. 69-76
[35] Biddle, M. (1975) pp. 300-1
[36] Wilson, D.R. (1975) p. 238
[37] Taylor, M.V. (1926) p. 231; Wilson, D.R. (1963) p. 135; (1970) p. 286; (1974) pp. 431-3; Dannell, G. & Wild, J.P. (1976) p. 191; Bishop, M.C. & Dore, J.N. (1988) pp. 9-10; Burnham, B.C. & Wacher, J.S. (1990) pp. 81-4
[38] Burnham, B.C. & Wacher, J.S. (1990) p. 61
[39] Hadman, J. & Upex, S. (1975) pp. 13-5; Wilson, D.R. (1975) p. 253
[40] Plouviez, J. (1973) p. 108
[41] Dean, M. (1980) pp. 369-70

corners.[42] The number of amphorae found in the various floor levels in the eastern *taberna* of *insula* xiv at Verulamium implies that this was a wine shop. As such, its position on the corner of Watling Street was especially well suited for business.[43] In modern settlements retail corner facilities are widely used to sell convenience goods and higher level activities such as banking are found in the town centres or more important roadways.[44] This may have been in case in Roman times, as the development of the *Forum Romanum* from mundane shops, to banks which were in turn replaced by the highest level of activity which was public buildings would imply (see Chapter I.i).[45]

ii) Shared business

Shared business is that which is secured by the *taberna* through the generative power of its neighbours. For this kind of trade the establishment must locate itself adjacent to existing retailing establishments. This would seem to go against the basic aim of most retailing which is to make a profit by frequently cutting into someone else's catchment area and to take someone else's trade.[46] If a *taberna* located on a side street is marginally making a profit it may not be advantageous for another shop to start business on the same street, as to divide the customer catchment area may mutually destroy their chances of making a profit. On the other hand, if the original *taberna* is acquiring a reasonable income the margin may tempt others and leave both with adequate returns. In this case an unnecessary multiplicity of shops can be created and it might be expected that one or both will reduce prices and that only the most efficient or with the largest capital would survive.[47]

Extremes of contest can sometimes be to the detriment of all concerned and if a competitor cannot be eliminated some form of market sharing and a limited form of co-operation can develop.[48] Certain types of *taberna* may be compatible with other varieties, or even with shops of the same type, as *tabernae* sited next to each other will attract more

[42] Boissier, G. (1905) p. 423
[43] Frere, S.S. (1958) p. 8
[44] Morrill, R.L. (1970) p. 74; Shepherd, I.D. & Thomas, C.J. (1980) p. 35
[45] Livy ix.40.16; xxvii.11; xl.51.5
[46] Needham, B. (1977) p. 89
[47] Levy, H. (1949) p. 218
[48] Raper, R. (1977) pp. 194-5

trade then they would if they were sited well apart. For the consumer this occurrence offers the attraction of the ability to make comparisons between *tabernae*. A continuous and unbroken shopping frontage is believed necessary by modern shopkeepers to achieve a high sales turnover. The reasoning behind this is that it is thought that a break in the shopping frontage reduces the attractiveness of the street or area to customers and shops owners will do what they can to prevent this happening.[49] While the *tabernae* that are involved in generative trade are more open to the possibility of a wider choice for potential locations, those that deal in shared business are effectively restricted to certain places in which they are likely to have appropriate neighbours.[50]

Tabernae involved in different types of retailing and crafts often sought each other out to gather together on the same street. The activities that are most likely to form such clusters are those that are mutually beneficial that include clothing, jewellery and footwear.[51] A special quarter, district, or street sometimes seems to be allotted to a particular economic pursuit. The clustering of equivalent types of *tabernae* can also be more profitable than individual isolation. Some shops, especially specialist retailers, sometimes select sites near shops offering similar merchandise for sale. The majority of the shops in *insula* xiv at Verulamium seem to have been involved in metalworking particularly in bronze.[52] If the potential consumer base is high a retailer will not object to similar establishments as long as the share of the divided market is greater than one large share.[53] At the same time *tabernae* that sold identical goods may cluster together in order that their competitors did not capture an excessive share of the market. The grouping of *tabernae* will be of special relevance to those selling comparable goods but sometimes adjacent shops that appear to be competitive can in fact be complementary due to the subtle but significant differences between merchandise and services offered.[54]

The localisation of certain crafts and merchants may also be intimately linked to the societies technological base. In a society where communication can be limited the grouping of similar retailers and crafts together allows buyers foreign to a settlement to find

[49] Needham, B. (1977) p. 99
[50] Guy, C.M. (1980) p. 45
[51] Morrill, R.L. (1970) p. 74
[52] Frere, S.S. (1958) p. 6; (1959) p. 4; (1972) pp. 18-9, 27, 42
[53] Ornstien, E.J. (1976) p. 82
[54] Needham, B. (1977) p. 93

certain types of shops.[55] It could enable the more coherent interaction of producers, middlepeople, retailers and consumers and this may be linked to the guild system that would in turn foster further group cohesion.[56]

iii) Suscipient trade

Tabernae may have based their trade upon suscipient business that is not generated by the shop itself or its neighbours, but by some other land use.[57] In a further effort to attract potential customers *tabernae* tended to locate themselves close to where large numbers of people gathered such as at public amenities and the most obvious of these is the forum. The forum as a market centre would not only have attracted urban customers but also those from the surrounding rural area. Even if the latter had no intention of going to one of the street-side *tabernae* they could not help but notice them as they passed by and perhaps make a purchase. In the same way individuals that went to the central *tabernae* may have been attracted to the market. Hence both the *tabernae* and market were mutually beneficial and compatible with each other.

Another commercially attractive site would have been temple complexes where the choice of site was probably dictated less by piety and more by profit. A temple located between several strip-buildings was uncovered in *insula* viii south of the forum at Wroxeter and dated to the later half of the second century (Figure 37). The adjacent buildings on either side of the temple complex probably functioned as shops and manufactories as evidence for furnaces and metalworking were found across the site. The proximity of the establishments next door to a temple and their location on the main north-south street to the forum enabled enough capital to be accumulated by one individual to expand their property across neighbouring plots.[58]

Strip-buildings were located adjacent to the Romano-Celtic temple at Caerwent (Figure 38). The temple was located in the south-west corner of *insula* ix next to the forum

[55] Raper, R.A. (1977) p. 195
[56] Sjoberg, G. (1960) p. 101
[57] Guy, C.M. (1980) p. 45
[58] Bushe-Fox, J.P. (1913) pp. 5-23; (1914) pp. 1-9; (1916) pp. 4-20; Webster, G. & Stanley, B. (1964) p. 371; Lewis, M.J.T. (1965) pp. 69-70; Walthew, C.V. (1975) pp. 191-2; Crickmore, J. (1984) pp. 66 & 81; Wacher, J.S. (1995) p. 371; Holbrook, N. (1998b) pp. 189-211

complex and fronting onto the main east-west street. The site of the temple was originally an open courtyard that may have belonged to the adjacent strip-building. As the construction of the temple in *c.*A.D. 330 coincided with the final phase of the workshop this may substantiate this claim.[59] Further along the main road to the east was Building XVIIIn that was originally three separate strip-buildings.[60] In its latest stage these were amalgamated into one larger house as in Wroxeter Site VI (see Chapter III.iii).[61] On Lower Brook Street in Winchester a small Romano-Celtic temple was constructed on the replanned street during the end of the first century. To the south of this was a strip-building that contained a large raised hearth that was involved in some unidentified industrial purpose (Figure 44).[62] The glass factory at Caistor-by-Norwich was also located adjacent to the forum and two temples (Figures 37 & 47).[63] In similar cases, such *taberna* establishments frequently appear in continental temple-sites such as that of Lenus Mars at Pommern[64] and Dhronecken,[65] Germany, where they catered for the trafficking of wares, small votive offerings, cult-figurines, relics and the likes.[66] It has been suggested that the adjacent buildings to these temples may have been priests' houses and attendant shops. However, it would seem that in the cases of Caerwent and Wroxeter the buildings had different owners with separate personal stakes.[67] These *tabernae* were located along the main street or close to the cardinal point of the town, and in the case of Caerwent pre-dated the temple. This would suggest that the sale of sacred relics was perhaps not their only line of business.[68]

The potential economic success of a site near a temple would have been influenced by a number of factors, not least of which would have been the prominence of the shrine that would have varied with some dominating the principal streets while others were consigned to back streets. Their position in the townscape would have depended in part on

[59] Brewer, R.J. (1990) pp. 78-80; (1993) pp. 58-9; Frere, S.S. (1995) p. 260; (1996) p. 369; (1997) p. 308
[60] Ashby, T., Hudd, A.E. & King, F. (1910) p. 7
[61] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 8-11
[62] Wilson, D.R. (1972) p. 349; Biddle, M. (1975) pp. 298-9
[63] Atkinson, D. (1931) pp. 106-24; Richmond, I.A. (1966) p. 78; Price, J. & Cool, H.E.M. (1989) pp. 24-7
[64] Wightman, E.M. (1970) p. 220
[65] Wightman, E.M. (1970) p. 223
[66] Nash-Williams, V.E. (1953a) pp. 91-2
[67] Wacher, J.S. (1995) p. 387; (1998) pp. 256-7
[68] Nash-Williams, (1953a) p. 96

the wealth of the cult and the time the shrine was set up. Evidently, such a location was advantageous to *tabernae* as is indicated by the later additions to the retail establishments.

The positioning of *tabernae* close to religious buildings was no accident of location as retailers would have sought out such sites as is shown by the discovery of *tabernae* on isolated sacred sites. Temples, especially those in towns, were built to serve specific groups of people and their location may have been determined by secular considerations. Exceptions to this would have been those where for example a sacred spring would have been the origin of the settlement. In the countryside the siting of a temple was not dependent upon the residence of a large number of people but on pilgrims.[69] Even in such detached places there are many cases of *tabernae* that drew prosperity from being at the centres of religious cults not associated with towns.

The religious complex of the temple of Apollo at Nettleton is one of the better understood sites. The complex contained guesthouses, a priest's house, a guardhouse, a strong room, an inn, workshops and other buildings. Many of the structures associated with the shrine precinct had industrial uses and contained evidence of metalworking (Figure 48).[70]

The temple of Nodens at Lydney lay in a spacious precinct and was associated with a guesthouse, baths and other structures that indicate that the cult was an important centre for pilgrims. To the south of the complex was a long building that might have contained shops that sold various wares to visitors to the shrine. Alternatively the building may have been used to house weary and sick devotees. Lydney like most rural sanctuaries was isolated and accommodation and other amenities would probably have been required by all but the most local of worshippers.[71] The precinct buildings of Uley included Building I to the west of the temple that may have been a shop.[72] Evidence of industrial activity was

[69] Lewis, M.J.T. (1965) p. 129
[70] Wedlake, W.J. (1982) pp. 16-75; Burnham, B.C. & Wacher, J.S. (1990) p. 191; Woodward, A. (1992) p. 49
[71] Wheeler, R.E.M. & Wheeler, T.V. (1932) pp. 15, 44-57; Lewis, M.J.T. (1965) pp. 88-92; Liversidge, J. (1968) p. 462; Jackson, R. (1988) pp. 166-7; Woodward, A. (1992) pp. 47-9
[72] Goodburn, R. (1978) p. 457; Ellison, A. (1980) p. 313; Woodward, A. & Leech, P. (1993) pp. 41-4 & fig. 35

found throughout the Springhead temple site (Figure 49).[73] The retailers that lived on temple sites may have been tenants paying rents to the sanctuary.[74]

Votive offerings and other items must have been available to pilgrims to temple sites especially if they had travelled a great distance or if the deity demanded specific offerings. An inscription found on the temple of Mercury at Yverdun in Switzerland stated that votive offerings could be bought on the premises and affixed to the building for a fee - *dona venibunt et ex stipibus ponentur*.[75] A tenuous parallel to this was found on the mosaic floor of the *cella* belonging to the temple at Lydney that has a fragmented inscription that also uses the term *ex stipibus* 'out of offerings or fees'.[76]

It is evident that temples played a very considerable role in the economic life of Roman Britain and in many ways religious shrines actually facilitated trade. Temples needed to secure some form of income if they were to survive. This could have been gained in the form of regular offerings or as outright gifts. Presumably offerings were a feature of daily life and votive offerings would have been manufactured and sold by local *tabernae* that were either connected to or independent of the actual religious complex. It can be seen that there was a tremendous range and quality in the votives found in shrines.[77]

Pilgrims and visitors to a religious site would have at most required accommodation and entertainment, or at least the prospect of purchasing a votive offering and food and drink, and they would have brought wealth and prosperity with them and this would have stimulated commercial ventures based on these provisions.[78] The gathering of people to these shrines probably created a strong connection between religious sites and markets in many localities.[79] It can be seen that religious sites played host to a whole range of religious but also retail activities.

Bath buildings were another important place where a great number of people travelled to cleanse themselves. *Tabernae* could also be found there, as Baths were not

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[73] Penn, W.S. (1957) pp. 53-70; (1958) pp. 79-80; (1959) pp. 18-9; (1968) pp. 164-70; Wilson, D.R. (1967) p. 232; (1971) p. 288; (1972) p. 352; (1973) p. 323; Goodburn, R. (1978) p. 472; Burnham, B.C. & Wacher, J.S. (1990) p. 197; Woodward, A. (1992) p. 47

[74] Carlsen, J. (1993) p. 12

[75] Wheeler, R.E.M. & Wheeler, T.V. (1932) pp. 49-52

[76] The full inscription reads something like *D...tilvivs Senilis Pr Rel Ex Stipibus Possuii O...ante Victorino inter..ie.* Wheeler, R.E.M. & Wheeler, T.V. (1932) p. 103

[77] Postgate, J.N. (1972) p. 815; Jackson, R. (1988) pp. 160 & 166; Woodward, A. (1992) pp. 67-72

[78] Cunliffe, B. (1986) p. 42

[79] Greene, J.P. (1975) pp. 133-8; de Ligt, L. (1993) p. 28

only a place of cleansing but also of social intercourse.[80] People may also have journeyed to the baths for medical treatment from a doctor in one of the smaller booth-like *tabernae* that often flanked the street entrance of town baths. A set of surgical instruments found in one of the rooms of the Roman baths at Xanten may have belonged to one such an individual.[81] Strip-buildings were located in the *insula* immediately to the west of the baths at Caerwent but there is little evidence of their function.[82] To the west of the baths at Wroxeter there was a building used by a metalworker.[83]

Bath is one of the best known bathing sites in Britain that also included temples and possibly a theatre. The location of Bath on an important route node would also have attracted and aided the commercial development of the site. There must have been numerous *tabernae*, residences and hostels to cater for the many visitors and workers to the site.[84] A building found at Citizen House contained two industrial hearths.[85] In a waterlogged pit discovered at Wilcot Street a large quantity of mid-second century leather off-cuts, shoes and shoe parts were revealed.[86] Traces of glass working were found south of Victoria Park.[87] The public baths at Pompeii were surrounded by *tabernae*. Sometimes former residences in the adjacent *insulae* were converted into *tabernae* such as the southern side of *Regio* VI.8 that was close to the Forum Baths. In this case the building is know to date to the second century B.C. but the façade is now dated to the period before the city's destruction.[88]

An amphitheatre was a further place that people would have congregated to be entertained. House VIn at Caerwent was a strip-building that had several rooms and furnaces and was placed just to the north-east of the forum and *en route* to the amphitheatre (Figure 50).[89] However, this example seems unique and its location close to the forum may have had a stronger influence over it's location than the amphitheatre. The amphitheatre in

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[80] Jackson, R. (1988) p. 48
[81] Künzl, E. (1986) pp. 492 fig. 1; Jackson, R. (1988) p. 154
[82] Nash-Williams, V.E. (1930) pp. 229-31
[83] Wright, T. (1897) pp. 159-66; Webster, G. & Stanley, B. (1964) pp. 118-23, 127; Wacher, J.S. (1995) pp. 371-3
[84] Cunliffe, B. (1971) pp. 66-7, 79; (1986) pp. 19-47
[85] Wilson, D.R. (1971) pp. 275-6; Cunliffe, B. (1996) p. 92
[86] Wilson, D.R. (1972) p. 241; Cunliffe, B. (1996) p. 99
[87] Cunliffe, B. (1986) p. 42
[88] This information was provided by Astrid Schoonhoven who has worked on the site. Personal e-mail <astrid@rulpre.leidenuniv.nl> 3 March 2000.
[89] Ashby, T., Hudd, A.E. & Martin, A.T. (1904) p. 111

Pompeii does not seem to have influenced the retail geography of the surrounding area. It is possible that amphitheatres were not frequently used and this may be supported not only by the lack of near-by *tabernae* in Pompeii but also by their frequent location outside the settlement area in Cirencester (Figure 8) and Silchester (Figure 21). Even in the case of both Caerwent (Figure 22) and London (Figure 19) the amphitheatre is placed at the periphery of the towns.

The prosperity of the settlement at Catterick was marked with the reconstruction of the many strip-buildings in stone that coincided with the building of the *mansio*. The *mansio* building seems to have formed the core of the settlement that was to become one of the most important 'small towns' of northern Roman Britain.[90] The earlier *tabernae* were presumably attracted to the site by the location of the auxiliary fort and the river crossing of the Swale.[91]

In many cases *tabernae* seem to have been located at or adjacent to shrines and public buildings to provide for and take advantage of the needs of pilgrims and visitors to the particular site. In such a location they must have supplied small votive plaques or similar mementoes and trinkets to visitors to a religious site, or offered sustenance and other services for the weary travellers to the public complexes.

iv) Raw materials & services

Other factors that dictated the location of a *taberna* can be affected by reasons of pure convenience to the retailer or manufacturer. Those that needed constant supplies of raw materials, water and fuel would tend to locate themselves close to these resources and as a result are often found near together. As some crafts had to work in close proximity to the sources of their materials by necessity they may have been practised in isolation from the rest of the community.[92]

The best example of industries locating themselves close to their supplies can be seen at London (Figure 19). Much of the first to second century finds from the Walbrook area is of an industrial origin with pottery kilns, furnaces, scrap metal and slag being

[90] Wilson, P.R. (1999) pp. 370-83
[91] Burnham, B.C. & Wacher, J.S. (1990) pp. 37, 111-7
[92] Burford, A. (1972) p. 80

particularly noticeable. A great deal of leather and unfinished shoes has also been found in the Walbrook valley. There can be little doubt that the convenience of a good water supply attracted workshops and the leather-workers to the neighbourhood of the stream.[93] Not only was water an important component of many manufacturing processes but also a near-by river was convenient for the disposal of refuse.

Another industrial zone was located on a stream in the Paternoster Row area that lay between the Fleet and the Walbrook. It has been suggested that this stream had been artificially diverted to channel itself through the industrial area to suit the purposes of the workshops located there. However, the stream follows the natural contours of the area implying that it was a natural watercourse. Hence the industries had been attracted to this area because of the water supply rather then imposing an unnatural river route through the industrial area. The possibility still remains that like the Walbrook this stream was artificially controlled. It seems that the streams that ran between the two hills of Roman London were extensively exploited, and were probably used for a variety of purposes, as a power source for water mills or as water supply for industrial use.[94]

The *tabernae* that offered services, such as inns and hostels would naturally have offered themselves at the points of entry into a town.[95] This can be observed in Pompeii where the gate areas are predominantly service orientated towards the traveller.[96] The Silchester hostel, inn or *mansio* found in *insula* viii had a large entrance, substantial bath-house and numerous rooms and was placed just beside the south-west gate and directly on a north to south route into the city centre.[97] Similarly the hostelry in Caerwent is the largest building in the town and was conveniently positioned beside the south gate and the main north to south road to the forum.[98] The Verulamium 'wine shop' was in close proximity to the London Gate and on the main route to the forum.[99] Buildings vi.1, vi.2[100] and viii.2

[93] Merrifield, R. (1965) pp. 47 & 93; (1983) p. 104; Marsden, P. (1969) pp. 39-44; (1980) pp. 41 & 74; Lees, D., Woodger, A., & Orton, C. (1989) p. 115; Maloney, C. & de Moulins, D. (1990) pp. 5, 84, 124; Perring, D. Roskams, S. & Allen, P. (1991) pp. ix-x, 112-8; Wilmott, T. (1991) pp. 12, 172-80; Grimes, M. (1995) pp. 60-4

[94] Wilmott, T. (1982) pp. 234-6

[95] MacMullen, R. (1974) pp. 71-2

[96] Raper, R.A. (1977) p. 198

[97] Fox, G.E. (1894) pp. 223-8; Liversidge, J. (1969) pp. 59-60; Boon, G.C. (1974) pp. 138-44; Wacher, J.S. (1995) pp. 277-8; (1998) p. 170

[98] Ashby, T. (1905) pp. 297-307; Liversidge, J. (1969) p. 60; Wacher, J.S. (1995) p. 382

[99] Wheeler, R.E.M. & Wheeler, T.V. (1936) pp. 78-85; Niblett, R. (1987a) pp. 33-5

[100] Wheeler, R.E.M. & Wheeler, T.V. (1936) pp. 112-3; Niblett, R. (1987a) pp. 55-5

have been identified as *tabernae* and these where located close to the triumphal arch and London Gate.[101]

Horrea or warehouses would tend to be located near points of river access to roads or along quaysides.[102] Behind the London waterfront the buildings of Regis House[103] and Pudding Lane/Peninsular House remain the only structures that have been identified as warehouses.[104] If the approach road to the bridge ran to the east of the Regis House warehouse the site may have been a loading area for goods destined to cross the bridge.[105] There must also have been many private stores such as that at Courage's Brewery,[106] which was also located close to the waterfront in Southwark, but most small scale private storage probably took place in the retailer's premises and would be indistinguishable from private houses. It may be presumed that there were other storage facilities, including the forum, in other parts of the city.[107]

v) Other Factors Influencing Location

Sometimes, as in Pompeii and Rome, *tabernae* were combined with other structures to form a dual purpose as retail establishments and screen buildings. These structures would have offered protection to the inner structure from the noise and confusion of the street but also provided lucrative resources. How extensive this practice was in Roman Britain is not known but screen buildings were a frequent part of public complexes in Italy, and the owners of large private houses did not hesitate to use their valuable street frontage in this way.[108] Temple courts were commonly separated from the streets by such structures. Examples can be seen in III.ii.1 and V.xi.1 in Ostia and this probably helped defray many of the cult expenses.[109] At Carmarthen a typical Romano-British temple of the second century was set back from the street in this fashion. Only the north-western and south-

[101] Wheeler, R.E.M. & Wheeler, T.V. (1936) pp. 120-1; Niblett, R. (1987a) p. 56
[102] Vitelli, G. (1980) p. 60; Milne, G. (1995) pp. 64-6
[103] Brigham, T. (1998) p. 32
[104] Merrifield, R. (1983) p. 91
[105] Brigham, T. & Watson, B. (1998) p. 46
[106] Dillion, J. (1989) pp. 229-31; Girardon, S. & Heathcote, J. (1989) p. 78; Dillon, J., Jackson, S. & Jones, H. (1991) p. 261; Brigham, T., Goodburn, D., Tyers, I. & Dillon, J. (1995) p. 29
[107] Brigham, T. (1998) pp. 32-3
[108] Wallace-Hadrill, A. (1994) pp. 122-31
[109] Packer, J.E. (1971) pp. 6-7

western sides of the temple and neighbouring area have been excavated and this revealed that it was flanked by workshops. A difficulty with the site is that it is uncertain whether the temple was ever completed. Despite this, the structure to the north-west seems to have been quite substantial and would certainly have acted as a protection on this side (Figure 51).[110]

The temple found in *insula* vii at Silchester was located well in from the roadside and more or less in the centre of the *insula*. None of the buildings to the north, south and west of the shrine were of the courtyard variety and most had their gables facing onto the street. Rooms 1 and 2 of House 3[111] as well as room 1 of House 4 have been identified as shops. The eastern area of the *insula* seems to have been devoid of structures and may have been part of the temple precinct but no evidence for this was discovered.[112] It is possible that this area may have been built up with less substantial wooden structures that were unnoticed by the early excavations. In general, the temples located inside towns lay away from the centre of their believed precinct. There is little evidence of any substantial structures that may have caused this and the intention may have been to create a temple court effect where public sacrifices could take place. Alternately this vacant area may have been to accommodate the stalls of retailers selling *ex votos* and trinkets to passing supplicants.[113] This action may have created a mini-landscape within the town.[114]

While these examples of possible screen buildings around temples are rather tenuous there is stronger evidence for the use of *tabernae* placed in front of, or even as part of, more extensive dwellings in Roman Britain. This was common practice in Italy. The largest and most wealthy houses of Pompeii had *tabernae* flanking their entrances and the best example of this is the *Casa del Fauno*, VI.12,[115] which occupied an entire *insula*. Another occurrence can be seen in the House of the Tragic Poet, VI.8.[116]

Room 4 of House XIIs in Caerwent had good concrete floors and a doorway onto the street 2.6m wide (Figure 52). Room 3 contained a furnace and was entered from the

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[110] James, H.J. (1984) p. 51; (1990) p. 88; (1992) pp. 12-3; (1993) pp. 96-7 & fig. 3; James, H.J. (1987) pp. 44-5
[111] Hilton Price, F.G. (1887) pp. 269-70
[112] Fox, G.E. & Hope, W.H. (1894) pp. 199-207; Boon, G.C. (1957) p. 123; (1974) p. 157
[113] Lewis, M.J.T. (1965) pp. 134-5
[114] My thanks to Dr. John Pearce for pointing this out. <John.pearce@literae-humaniores.oxford.ac.uk>
[115] Wallace-Hadrill, A. (1994) p. 210
[116] Jackson, R. (1988) p. 174

front rather than the main house. Their location close to south gate and their design make it quite possible that these rooms functioned as *tabernae* with room 4 being connected with the main house and room 3 left independent.[117] Rooms 11 and 12 seem to have been part of House XIIn but at the same time were separate as they could only be entered from the open space to the north. Both had work floors and the surface of room 12 was 0.79m above that of the corridor of the main house. There is no indication as to their use but room 12 had the foundations for some unknown erection on its sidewalls that may have functioned as seats 0.51m wide.[118] It is possible that this room could have housed a *collegium* headquarters.[119] The doorways into the rooms were small but this does not mean that they did not have some form of retailing function. Although most of House XIIIs remains unexplored room 4 had a wide doorway separate from the rest of the façade and a large furnace and was probably a workshop.[120]

Rooms 2 and 3 that fronted onto the street of a large courtyard building xiv.1 at Silchester were probably used as shops.[121] Similarly in House ii.2 rooms 3, 7 and 8 were given over to retailing.[122] The substantial Building xxviii.1 in Verulamium had a number of rooms fronting onto the street. While rooms 4 and 7 were made into public latrines rooms 1 and 6 were used in retailing (Figure 53).[123] Colchester has produced several examples of what could be seen as respectable buildings with mosaics and painted wall-plaster that were connected with workshops. In Building 20, a substantial courtyard house, two of the four rooms fronting onto the street were workshops.[124] The rooms on the frontage of Building 16 and the succeeding Building 19 were used as workshops.[125] Room 7 of Building 25 was involved in industry (Figure 16).[126] Building 70 on the Middleborough site, Colchester, was a substantial building with rooms arranged on at least three sides of a courtyard house (Figure 18).[127] The two rooms that faced the street had

[117] Ashby, T. (1905) pp. 299-300
[118] Ashby, T. (1905) p. 300
[119] My thanks to Dr. Chris Walthew for making this suggestion.
[120] Ashby, T. (1905) p. 308
[121] Fox, G.E. & Hope, W.H. (1896) p. 221
[122] Fox, G.E. & Hope, W.H. (1892) p. 276
[123] Frere, S.S. (1958) pp. 9-12; (1981) p. 386; (1983) pp. 246-7
[124] Crummy, P. (1984) pp. 62-3; Wacher, J.S. (1989) p. 113
[125] Crummy, P. (1984) pp. 50-4; Fulford, M. (1989) p. 190
[126] Crummy, P. (1984) p. 69
[127] Crummy, P. (1984) p. 159

plain daub floors and ovens and were probably shops or had a utilitarian use.[128] The site also had the added advantage of being close to the western gate that entered the city. The proportion of workshops that are an integral part of the élite house is sufficient to show that street fronts were presumably valuable enough to convert many into *tabernae*.[129]

There are several instances of successful retailers expanding their dwelling by amalgamating neighbouring buildings best seen at Wroxeter[130] and Caerwent (see Chapter III.iii).[131] Keeping a location, rather then moving elsewhere, would have been important for a business that had expended a great deal of effort building up its customer base that may be lost through relocation. All businesses face the risk of failure and this includes any type of change, ranging from management, types of merchandise, advertising or a new store location. Change in any form increases the possibility of failure as the predictability of the future diminishes. As the Roman settlements developed the financial toll of failure increases due to the presumed rising costs of land, building and construction, and the significance of avoiding a poor location becomes magnified.[132] Despite the fear of taking a gamble the reason for staying may simply have been that the location had been successful in the past and there is no reason to suspect that it would not be so in the future. This may explain why premises tended to expand into other neighbouring properties rather than moving. This being said, how to interpret evidence of people moving to allow them to expand their business is perhaps impossible.

Discussion

The over all pattern of land use within any urban area is the result of the interaction of many diverse socio-economic factors.[133] In an effort to elucidate these forces several theories of modern land use have been developed, the pre-eminent of these being the

[128] Crummy, P. (1984) pp. 162-5
[129] Jongman, W. (1991) p. 178
[130] Bushe-Fox, J.P. (1916) pp. 4-20; Wacher, J.S. (1975) p. 369; (1995) p. 371; Walthew, C.V. (1975) pp. 191-2; Crickmore, J. (1984) pp. 66 & 81; Holbrook, N. (1998b) pp. 189-211
[131] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 7-11; (1911) pp. 421-6, 433; Dunning, G.C. (1948) p. 94; J.R.S. 39 (1949) p. 97
[132] Mercurio, J. (1984) p. 238
[133] Everson, J.A. & FitzGerald, B.P. (1972) p. 53

'central place' theory. Central place theory was developed in the 1930's by Christaller[134] and is based upon several assumptions about the behaviour of retailers and consumers.[135] Urban space gathers people, accumulates them and concentrates them together in one place. In fact to say 'urban space' is to say centre and centrality.[136]

It can be seen that a cardinal point was an important factor in the minds of the retailers of Roman Britain. Despite the fact that the central place *par excellence* was taken over by the forum retailers still strived to find a location as close to the core of the settlement as possible. This is especially evident from the layout of smaller towns that lacked such a public complex. The settlement nucleus would have been where the main roads converged and this would have provided not only the largest numbers of shoppers but also the broadest spectrum of the total market.[137] In addition some crafts would have involved and needed the investment of capital and this may have been more readily available in town centres than elsewhere.[138]

Tabernarii could not survive in business unless there was sufficient aggregate demand for their products among the population in which they operated. Quite simply the suppliers of goods and services would find it easier to make a living in the centre of a sizeable population settlement than in nucleated villages. This does not mean that there is a direct correlation between the settlement size of a city and village. Some of the smaller towns are considered to have developed primarily through either extractive or manufacturing industries. Charterhouse probably relied upon the exploitation of local silver and lead.[139] Wilderspool has revealed a great deal of metalworking activity as well as glass, tile and pottery.[140] However, these were dependent upon the availability of local materials. In some large villages the success of a retailing enterprise could have been hampered by a strong tradition of home production.[141] Although a specialized function

[134] Christaller, W. (1966)
[135] Guy, C.M. (1980) p. 21
[136] Lefebvre, H. (1991) p. 101
[137] Ornstien, E.J. (1976) p. 83; Hodder, I.R. (1972) p. 889; Needham, B. (1977) p. 93
[138] Schofield, J. & Vince, A. (1994) p. 99
[139] Elkington, H.D.H. (1976) pp. 183-97
[140] Thompson, F.H. (1965) pp. 67-86; Hartley, K.F. & Webster, P.V. (1973) pp. 77-103
[141] de Ligt, L. (1993) p. 132

may have existed, many small-towns developed a range of functions to exploit their urban potential.[142]

The kind of *tabernae* that were located near the centre of a town were probably those that were visited less frequently and these include those that dealt in higher order merchandise for example the fine pottery and glass sold from the Colchester 'pottery shop' (see Chapter IV.ii.1). These require a higher potential clientele to purchase goods of a generally higher value and will tend to seek out a more central location that is commensurate with their capital ability.[143]

It appears that the central place theory can at best only provide a partial explanation for retail behaviour.[144] The theory at least offered an early normative focus of study but its basic postulations have proven too simple to explain complex behavioural patterns.[145] While centrality is still regarded as an important element in understanding certain aspects of modern retailing its position of primacy has gone. The focus is less on central place theory as such but is more concerned with the functioning of retailing as a business that operates in space.[146] A theory that may be applicable to settlements in Roman Britain is the 'economic theory' of location but in the absence of property rates this is difficult to substantiate. The greatest limitation when exploring the economics of land value in past societies is that values cannot be analysed in monetary terms but can only be assumed from the wealth connotations of various archaeological, architectural and artistic forms.[147] Furthermore, a basic knowledge would suggest that *taberna* fronts located along main traffic arteries would occupy a site of higher land value than those located in residential areas (see Chapter III.i).[148]

The economic theory is based on the assumption that in a competitive market the supply and demand of locations are held in equilibrium through the price mechanism or

[142] Burnham, B.C. & Wacher, J.S. (1990) pp. 41-2
[143] Everson, J.A. & FitzGerald, B.P. (1972) p. 79
[144] Berry, B.J.L. (1967) p. 106; Cohen, S.B. & Lewis, G.K. (1967) pp. 17-42; Vance, J.E. (1970) pp. 138-67; Beavon, K.S.O. (1973) pp. 18-66; Davies, R.L. (1976) pp. 6-7; Guy, C.M. (1980) pp. 21-2; Shepherd, I.D. & Thomas, C.J. (1980) p. 23; Clark, D. (1982) pp. 95-113
[145] Johnson, J.H. (1967) p. 54; Shepherd, I.D. & Thomas, C.J. (1980) p. 82; Kivell, P.T. & Shaw, G. (1980) pp. 111-2
[146] O'Brien, L. & Harris, F. (1991) pp. 79-80
[147] Raper, R.A. (1977) p. 198
[148] Raper, R.A. (1977) p. 191

upon anticipated future returns.[149] The main aim of a *taberna* was to attract customers and the sites that people were attracted to were valued highly by *tabernarii*.[150] Competing users for a site will tend to locate relative to their economic potential so that a structure of site values relative to location results from market forces. Essentially the use of a location by any particular trade will depend upon that trade that is able to derive the greatest utility from it and therefore its activities will be optimally located.[151] The highest order of activity that could occupy a site will ultimately be public structures. In this way the *Forum Romanum* followed the development pattern of retail geography (see Chapter I.i).[152] This would also seem to have been in case in Pompeii as below the monumental centre of the city a row of *tabernae* were excavated on the east site of the forum in front of the Eumachia.[153]

Such optimal places would principally be along the main street frontages, in areas of high building density and around important urban features such as *fora*, temples and bathhouses.[154] The main factors that influenced commercial land prices must have been the level of economic activity.[155] It is still the core that offered the greatest accessibility to potential higher profit margins and consequently the highest land values.[156] The occurrence of different retailing areas would lead to what is known as a 'hierarchy of retail zones' in urban areas.[157] In this case the majority of the *tabernae* would exist in the larger centres and spaced at greater intervals within trade areas towards the periphery. A hierarchy of service centres would then exist with a higher-ranking centre containing a greater range of service functions.[158]

The supply and demand conditions of any locale can vary constantly in both a temporal and spatial level. The complexity of the environment and the variability of retailer's reaction to it make this even more difficult. Many factors affect the choice of

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[149] Guy, C. (1994) pp. 26-9
[150] Fairbairn, K. (1984) p. 59
[151] Raper, R.A. (1977) pp. 194-5
[152] Steinby, E.M. (1995) p. 333
[153] Maiuri, A. (1973) ref. from Astrid Schoonhoven. Personal e-mail <astrid@rulpre.leidenuniv.nl> 3 March 2000.
[154] Raper, R.A. (1979) p. 147
[155] Darin-Drabkin, H. (1977) p. 91
[156] Lösch, A. (1954) p. 247; Seyfried, W.E. (1963) p. 276; Wheatley, P. (1972) p. 618; Darin-Drabkin, H. (1977) p. 168; Kivell, P.T. & Shaw, G. (1980) pp. 103-5
[157] O'Brien, L. & Harris, F. (1991) p. 71
[158] Hodder, I.R. (1972) p. 889

location: price, rent, type of merchandise sold, sector of the market to be served, where the market lives, size of the market aimed at, proximity of competitors, proximity of other stores and ease of access to the *taberna.*[159] However, the striving for logic in human ecology's use of space often tends to expose the many examples that are far from logical. Individual retail decisions are often not based on what are thought to be universal rationale but by default, on intuition, reputation, guesswork and subjective experience and not because the location itself appears optimal.[160] As a consequence any changes in the advantage or disadvantage of a location were probably disregarded, unless the situation became unbearable.[161] Official action by public authorities can also interfere with the normal economic influences that affect the distribution of space.[162] The location decisions of small shopkeepers are likely to seem irrational and unpredictable but when considered *en mass* they will tend to be based upon the economic processes operating within that society.[163]

For many types of establishment a central location is not the most advantageous location and other factors may be important. Some retailers and industries would seek a waterfront location because of the bulky nature of their imported materials. Others may be considered noxious or consumed a large amount of space and an isolated site was required. On the other hand, light industries may have had strong orientation towards lines of communication such as roads.[164]

It would seem from the Walbrook area in London, as well as evidence from many other towns and cities throughout the Roman world, that particular regions were associated with certain types of activities. Despite this, there is little evidence for the planned zoning of any commercial quarters in Roman settlements but areas did become *de facto* associated with certain types of activity.[165] During the first century B.C. in Rome pottery was being manufactured exclusively on the Esquiline and in the Vallis Murcia. Shops that dealt in leather and associated leatherwork gathered in the locale of Transtiberim.[166] Often where

[159] Ornstien, E.J. (1976) p. 75
[160] Kivell, P.T. & Shaw, G. (1980) pp. 99-101
[161] Guy, C.M. (1980) pp. 63-4
[162] Raper, R.A. (1977) p. 195
[163] Guy, C.M. (1980) p. 64
[164] Everson, J.A. & FitzGerald, B.P. (1972) pp. 66-8
[165] Perring, D. (1991a) p. 284; Anderson, J.C. (1997) p. 331
[166] Anderson, J.C. (1997) p. 333

'zoning' does occur it does not seem to reflect what is thought to be economically rational.[167]

Various low-status groups in many ancient societies were relegated to the outskirts of a settlement through the efforts of the élite to minimise contact with them. This is most apparent with those occupations that are considered malodorous such as tanning, fulling and butchering.[168] In some cities, such as seventeenth century Kayseri in Turkey, industries like tanneries were frequently moved as the city grew in size or were located in some kind of compound.[169] This does not seem to have been the case in the Roman world as an examination of the distribution of butchers and fullers around Pompeii would illustrate.[170] For instance the *Fullonica Stephani* in *Regio* I.vi.7 shared a street block with other *tabernae* and houses.[171] Evidence of tanning and fulling has been found beside House xxxiv.1 in Silchester,[172] Building v.1 at Verulamium,[173] the Walbrook valley in London[174] and the site of the Baths Basilica at Wroxeter (see Chapter IV.i.3).[175] Butchers have been identified in the porticoes of the Wroxeter[176] and Cirencester *macellum* (see Chapter IV.i.6).[177] It would seem that what are regarded as unpleasant activities can be found in the heart of settlements in Roman Britain. It is interesting to note that such industries as well as other crafts that would have been considered noxious, noisy and a fire risk were permitted to be located in the town rather then on the periphery or in a separate manufacturing settlement. Presumably in this location they would be less offensive to the town inhabitants and would have had easier access to their raw materials. The possible reason for this is purely economic in that the town, by its population, would have been the largest consumer of these goods or services. This would have been essential for the marketing of finished goods but possibly also in some crafts for the purchase of raw materials.[178]

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[167] Laurence, R. (1995) p. 65
[168] Sjoberg, G. (1960) p. 99
[169] Faroghi, S. (1984) p. 166
[170] Laurance, R. (1994) pp. 61-4, figs. 4.3-5
[171] Jackson, R. (1988) p. 52
[172] Hope, W.H. (1907) pp. 446-9; Boon, G.C. (1957) pp. 192-3; (1974) p. 291; Wacher, J.S. (1978) pp. 91 & 209
[173] Wheeler, R.E.M. & Wheeler, T.V. (1936) pp. 109-11
[174] Heathcote, J. (1989) pp. 51-2; Perring, D. (1991) p. 51
[175] Barker, P. (1975) pp. 106-7; Goodburn, R. (1978) p. 437; White, R. & Barker, P. (1998) p. 56
[176] Grew, F.O. (1980) p. 368; Rankov, N.B. (1982) p. 358; Frere, S.S. (1983) p. 303
[177] Wacher, J.S. (1962) pp. 9-11; (1978) p. 212; (1995) pp. 306-7; Holbrook, N. (1998a) pp. 184-7
[178] Schofield, J. & Vince, A. (1994) p. 99

Taking any settlement from a very general viewpoint there is little evidence to indicate that *tabernae* or domestic residences disassociated themselves from each other. Each *insula* had an intermix of social classes living in the same area with buildings of what seem to be of a high status intermingled with those of a lower order.[179] In London's Watling Court during period iv Building D, which a substantial town house with mosaic floors, lay beside the more modest rectangular Building F.[180] Another large dwelling Building 6 in Leadenhall Court with its painted wall decoration, had several strip-buildings along side it.[181] There is the possibility that wealthy house owners had set-up clients in the adjacent strip-buildings. These retailers may then have sold the produce for their patron's estates and this may explain the contrast in building types and their subsequent unexplained demise.[182] The excavations of houses and shops seem to give evidence to the degree to which the homes of the wealthy did not attempt to distance themselves from trade as there was frequently a mixture of residence and commerce under the one complex.[183]

As pointed out above a close examination of the layout of any settlement can show that certain regions are associated with certain types of structures. There seems to be exceptions to this, as the extensive structure known as Site VI in Wroxeter was located in a position that would normally be occupied by a shop. However, the known plan is of the latest development of three strip-buildings that were amalgamated into one structure.[184] Similar examples can be seen in House XVIIIn,[185] XVs[186] and XVIs[187] at Caerwent along the main road (see Chapter III.iii). Many buildings may originally have had a commercial connection and the building of extensive structures that were solely residential was probably not as common as may first appear, as Caerwent and Wroxeter would seem to indicate. A factor that influenced the building of good houses in what would be considered a central shopping areas is that the forum was not only the centre of commercial life but

[179] Allason-Jones, L. (1989) p. 78; Laurence, R. (1997a) p. 8
[180] Perring, D. (1991) pp. 55-6; Perring, D, Rskams, S. & Allen, P. (1991) pp. 30-44; Milne, G. & Wardle, A. (1993) p. 144
[181] Milne, G. & Wardle, A. (1993) p. 143
[182] My thanks to Dr. Chris Walthew for pointing this out.
[183] Wallace-Hadrill, A. (1991) pp. 243 & 261
[184] Bushe-Fox, J.P. (1916) pp. 4-20
[185] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 7-11
[186] Ashby, T., Hudd, A.E. & Martin, A.T. (1911) pp. 421-27
[187] Ashby, T., Hudd, A.E. & Martin, A.T. (1911) pp. 427-34

also political, and the élite would be expected to live in close proximity to it.[188] House VIIn to the east of the Caerwent forum was an extensive structure that seems to have had no connection to commerce.[189] The élite may seek such an urban base to assert their political power and locate themselves in an area filled with *tabernae*.[190] This would illustrate their position in society by their ability to purchase a large site in an expensive location where they could also be seen. In general, the analysis of settlement centres normally shows that they are more heavily commercial than the peripheries and there is a greater intermingling of residential and non-residential usage in other regions.[191]

A *taberna* in some form could show up everywhere around a Roman town.[192] In areas where residential use was high it was never dominant as commercial outlets were frequent in their association with private houses.[193] It is likely that most surrounding *insulae* would have had a large enough population to sustain at least a small *taberna* selling everyday necessities.[194] The lack of available space, the inability to acquire a special type of site or to modify an existing one may encourage establishments to move away from the core of the town or city towards the periphery.[195] However, the farther from the town centre a *taberna* was located, the less attractive it became to customers especially if the shop specialised. Based on modern studies, this does not mean that the success of a retail establishment in what is apparently an unpromising site does not happen but, in general, one unsuccessful retail business will frequently succeed and be succeeded by other failed shops in a bad location.[196] The position of a *taberna* in what seems to be a residential district emphasises the penetration of economic activity into the urban framework.[197]

[188] Wallace-Hadrill, A. (1991) p. 258
[189] Ashby, T. (1907) pp. 451-64
[190] Sjoberg, G. (1960) pp. 87-8
[191] Perring, D. (1991a) p. 284; Wallace-Hadrill, A. (1991) p. 259
[192] Anderson, J.C. (1997) p. 331
[193] Raper, R. (1979) p. 146
[194] MacMullen, R. (1974) p. 72; Esmonde Cleary, A.S. (1989) p. 124
[195] Everson, J.A. & FitzGerald, B.P. (1972) p. 71
[196] Guy, C.M. (1980) p. 63
[197] Wallace-Hadrill, A. (1995) p. 137

Summary

The morphology of a town or settlement is formulated by the function performed by its streets and buildings. It will influence the visible form of buildings and functions found in particular areas and can be distinguished within the townscape. The forces that formed the street pattern, buildings and functions and subsequent changes can be very diverse, ranging from efforts to achieve profit maximisation on a site to the whims of customer fashion.[198]

In many ways normative approaches to retail location and decision making can seem to be far remote from the real world of the small shopkeeper.[199] In most cases the location of a *taberna* was quite simply dictated by an effort by both the retailer and customer to find each other and do business. The retailers of everyday necessities had little difficulty in this regard and probably appeared in some form on almost every street that could at least supply sufficient custom to support a small enterprise. However, a common knowledge of the general criteria that affected location layout would have allowed anyone upon entering a town for the first time to find their way to the centre of any settlement, by the width and the degree to which street frontages were utilised for commercial purposes, and by the number of people availing themselves of these resources.[200]

The study carried out by Raper[201] and the present discussion would seem to indicate that geographical location analysis could be a valuable tool for the archaeological study of site formation. Of course it does not offer a complete settlement framework but it does at least provide an explanation for the location of *tabernae*. The characteristics of the retail environment would seem to suggest that there was a fairly predictable pattern to location for *tabernae*. It seems clear that for some *tabernae* location was crucial for success but this choice may be limited by the suitability of sites at any point in time. Once a retailer acquired a particular premise the attributes of that location probably became less important than the abilities of the proprietor to achieve a reasonable profit. Essentially for the retailer there are pros and cons for every type of location. What the topographical information

[198] Johnson, J.H. (1967) p. 23
[199] Guy, C.M. (1980) p. 64
[200] Laurence, R. (1994) p. 135
[201] Raper, R.A. (1977) pp. 189-221; (1979) pp. 137-48

gained from location analysis does emphasis is how intimately and inextricably *tabernae* were bound up in the whole urban framework.[202]

[202] Anderson, J.C. (1997) p. 334

Chapter VI

Taberna Economics

This is a speculative attempt to explore the topic of *taberna* economics based on the evidence of the previous chapters. It is not an endeavour to impose a modern abstract economic system upon antiquity, but to say that an economy did exist that had rules and regularities of its own that gave it a measure of predictability. These may never be defined but in reality even today there is no universal law of economics. In fact a consensus has not been reached on the nature of economics in antiquity that Hopkins describes as an 'academic battleground'.[1] The Roman economy is complicated to understand and any attempt to comprehend it is highly controversial.[2] The great difficulty when looking at economics is that there was probably no concept of it, in the modern sense, in Roman Britain and no centralized information survives to show whether it was succeeding or failing.[3] The surviving evidence is fragmented and the Roman economy is built on these fragments.[4] There is also the great danger of modernising the Romans but there is equally the hazard of dismissing them as being predominantly unmodern.[5]

It is perhaps easiest to see the Roman economy as an uncomplicated system that would today qualify it for the modern definition of a 'developing country'.[6] The model proposed by Hopkins is for a whole series of small-scale changes in production, distribution and consumption, the collective influence of which over time was important. This is apparent from the increase in the size of towns and the growth in the number of artisans. Archaeological evidence from around the empire indicates that a sizeable surplus was being produced and consumed and that the average standard of living was higher over a wider area.[7]

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[1] Garnsey, P., Hopkins, K. & Whittaker, C.R. (1983) p. ix; Pleket, H.W. (1983) p. 131
[2] Frank, T. (1927); Rostovtzeff, M.I. (1957); Levy, J-P. (1967); Finley, M.I. (1973); D'arms, J.H. (1974); Duncan-Jones, R. (1974); Jones, A.H.M. (1974); Abrams, P. (1978); Hopkins, K. (1978); (1980); Garnsey, P., Hopkins, K. & Whittaker, C.R. (1983); Frayn, J.M. (1993); Harris, M.V. (1993) p. 11; Fulford, M., (1994); Whittaker, C.R., (1994)
[3] Reece, R. (1980) p. 110
[4] Garnsey, P., Hopkins, K. & Whittaker, C.R. (1983) p. xxii
[5] Harris, M.V. (1993) pp. 14-5
[6] Duncan-Jones, R. (1974) p. 1
[7] Hopkins, K. (1978) p. 36; Harris, W.V. (1993) p. 12

Finley states that a passage cannot be found in any ancient author that attributes the growth of a city to the establishment of manufacture.[8] Given the limits of the ancient sources and their attitude to commerce this is hardly surprising. It is certainly true to say that an agglomeration of interdependent markets did not exist in the modern sense. However, to say that business cycles did not happen is inaccurate, as individual businesses and even towns must have failed that were not the result of some natural disaster or political troubles. It is undeniable that catastrophes did take place and had a direct effect on production and trade[9] but these were not everyday occurrences. It was not major anomalies to the daily routine but the habitual routine itself that concerned individuals and *taberna* economics. Furthermore, Pucci wonders whether the ancient authors should be used for any statement of an economic kind.[10]

The aim of this chapter is to work towards a synthetic theory of *taberna* economics based on the variations of *tabernae* architecture and the use of space. It does not allow for many aspects of Roman society that are known to have existed such as patronage, clientage, dependency and bondage but restricts itself to the buildings themselves. This is not a modern concept as the magnitude of a dwelling for the Romans was a measure of the relative wealth and status of its occupants. The respectable and proper use of surplus wealth was to invest it in land. This is the uniform impression that the literary sources convey in their attempt to reflect the acceptable face of society.[11] In fact the spaciousness of the dwellings of the prosperous attracted the condemnation of contemporary moralisers such as Cicero,[12] Sallust,[13] Seneca,[14] Suetonius[15] and Plutarch.[16] Plutarch (First century A.D.) felt that people generally considered that being prevented from showing off their wealth was tantamount to having their wealth taken away from them.[17] Thus, the size of a building was not an indirect expression of rank but an explicit statement of social status.[18]

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[8] Finley, M. (1979) p. 22
[9] Finley, M. (1979) p. 142
[10] Pucci, G. (1983) p. 113
[11] Duncan-Jones, R.P. (1976) p. 12; (1990) p. 126; Casey, P.J. (1985) p. 43
[12] *de Officiis* 1.139; *de Domo* 116
[13] *Catilina* 12.3
[14] *de Beneficiis* 7.10.5; *Morte Claudii* 114.9
[15] *Augustus* 72.1; *Caligula* 37.2
[16] *Crassus* 2
[17] *Cato* 18.4
[18] Wallace-Hadrill, A. (1994) p. 72

In theory land value will vary with lot size. The limitations of plans in Roman Britain means that the vertical dimensions of buildings must be largely speculative. Ground plans alone cannot indicate the total possible living space of any structure as the remains of Pompeii, Herculaneum and Ostia demonstrate.[19] While the ground area of a house can point to the amount of dwelling space it is not equivalent to it. Despite this, Wallace-Hadrill states, 'plans dictate a building's maximum possible size'. A plot with a small ground area cannot sustain a larger house than a plot with a larger ground area, so long as the two are of the same construction technique.[20] In Britain strip-buildings occupy the smallest plots, and represent the most intensive use of land, while courtyard houses occupy the largest, representing the least intensive use. However, plot size is a highly significant variable in determining variations in the assessed land value.[21] The constraints of this are not important when comparing and contrasting like with like. Using this as a matrix anthropological models from a variety of sources have been used to build a possible hypothetical reconstruction of *taberna* sociology in Roman Britain.

The connection between general economic prosperity and building activity is a recurrent theme throughout human history, particularly when that dwelling is commercial in nature.[22] On a simplified level the effective demand for housing relates to need and the accommodation for which people are able and willing to pay. It takes no account of social desiderata, or of personal aspirations that cannot be fulfilled due to a lack of capital.[23]

Houses have been seen as a reflection of the psychological, ecological and ideological processes of the builder and inhabitants or as a manifestation of socio-cultural relationships, symbolising, mediating or showing social status and differentiation.[24] It can be seen that there are many forces acting on the built environment that do not actuate the structure itself. Housing is basically economic and all problems connected with it can be ultimately reduced to economic reasons, and are its results.[25] The time and effort that is spent constructing or modifying a *taberna* is labour that cannot be spent in other ways. The

[19] Ritter, F.A. (1971) p. 185
[20] Wallace-Hadrill, A. (1994) p. 75
[21] Ritter, F.A. (1971) pp. 188-9
[22] Delaine, J. (1996) p. 165
[23] Needleman, L. (1965) p. 18; Roberts, B. (1978) p. 146
[24] Bourdieu, P. (1973) pp. 98-110; Rapoport, A. (1977), (1982); Western, J. (1979) pp. 54-61; Toon, J. (1979) pp. 63-6; Lawrence, R.J. (1982) pp. 104-30; Rodman, M.C. (1985) pp. 56-72
[25] Hussain, M.K. (1979) p. 98

decision to allocate any effort on a building is a choice between consigning time to the *taberna* itself, instead of retailing, manufacturing or even relaxing. This is clearly the case in self-help housing (see Chapter II.vi). Similarly, capital spent on building materials or goods traded for fixtures and fittings represents the same allotment decision, but also a choice against other items that could be obtained. Wilk has suggested that the time, effort and resources that are devoted to construction represent decisions and choices that fall within the realm of consumption and the consumer environment.[26]

The method that has been adopted is to analyse *tabernae* from their ground-plans and the nature of construction work conducted during different periods. If this is to work one very general assumption must be made and this is that all the dwellings studied provided equivalent accommodation for their occupants.[27] This is a model that has already been adopted by Faulkner who has accumulated enough data to produce a quantitive analysis of urban development of the towns of Roman Britain. The core of this examination has been a survey of the buildings of Roman Colchester,[28] Verulamium[29] and Cirencester.[30] The results from these towns have been added by Faulkner to fourteen other towns, giving the results from over 1500 buildings from 300 sites, and this material has been used to support the more general theories of this chapter.[31]

In attempting to explain *tabernae*-economics and the inter-relationships between different markets, it soon becomes clear that complicated theories are involved and that the information available is unlikely to be sufficient for these suppositions to be adequately tested.[32] The results gained by this analysis are far from ideal but it is certainly more representative of the chronological activities of these settlements in Roman Britain than any one single building. The use of modern anthropological studies may help create a possible hypothesis that might further explain the motivations behind these occupational and

[26] Wilk, R.R. (1990) p. 35
[27] Needleman, L. (1965) p. 47
[28] Faulkner, N. (1994) pp. 93-120
[29] Faulkner, N. (1996) pp. 79-103
[30] Faulkner, N. (1998) pp. 371-88
[31] The other sites included were Brough-on-Humber, Caerwent, Caistor-by-Norwich, Canterbury, Chichester, Dorchester, Exeter, Gloucester, Leicester, Lincoln, London, Silchester, Winchester and Wroxeter. Faulkner, N. (1998) p. 372
[32] Needleman, L. (1965) p. 15

habitational pursuits. *Taberna*-dwellings are after all socio-economic rather than a technical utility.[33]

i) The Foundation of Roman Britain

Population movements, or migrations, have been taking place in various forms for centuries. The movement of people within and between countries has played an important role in determining population growth rates and in affecting other factors such as ethnic composition and social economics. In very broad terms, population movements can be divided into those that are forced and those that are voluntary.[34] In the case of forced migration people other than the migrants naturally make the decision to relocate.[35] The subsequent settlement and re-settlement of Britain after the Claudian invasion would have meant that the towns might have been regarded as a source of new capital due to building and the influx of people. This would have attracted natives, such as those from the old Dobunnic *oppidum* at Bagendon,[36] as well as people from other parts of the empire, especially entrepreneurs and those with little financial backing, hoping to succeed in the recently established towns. People frequently migrate to development and the movement of individuals from the countryside to towns is part of what urbanisation is about.[37]

Migration for professional reasons is important. The more skilled and specialised workers might come from far a field, whereas labourers and the unskilled tended to be local. People on the move bring wealth, culture and trade to the places they encounter and this was very important in the establishment of Roman Britain.[38] Inter-urban migration from towns on the continent to Britain may have been underestimated and this stepwise migration probably affected 'middle-class' persons such as shopkeepers and merchants more than any other class. During the settlement of Gaul as the taste for Roman goods developed, there were new opportunities for potters, stonemasons and architects, from

[33] Murison, H. & Lea, J. (1979) p. 145
[34] Potter, R.B., Binns, T., Elliott, J.A. & Smith, D. (1999) pp. 187-8
[35] Potter, R.B., Binns, T., Elliott, J.A. & Smith, D. (1999) p. 191
[36] Faulkner, N. (1998) p. 377
[37] Holsenberg, P.M. (1985) p. 89
[38] Healey, P. & Madani-Pour, A. (1993) p. 90

northern Italy and Spain.[39] Before the occupation of Britain traders and merchants were already spreading the more portable elements of Roman culture beyond its frontiers.[40]

The more affluent and 'established' individuals are less likely to leave. They may also have been later disinclined to move due to the devastating effects of the Boudiccan revolt, as they would have had the most to lose. These patterns prevail despite the best efforts to recruit 'respectable' migrants and limit the presence of 'undesirables'. However, it was these 'undesirables', particularly 'undesirable' Britons, that were the target of urbanisation and they were to be assimilated into the new Roman province of Britain. It is apparent from Tacitus that the aim of the provincial governor Agricola was to 'culturally romanize' the native aristocracy and presumably this process would in turn disseminate throughout the rest of the population.[41] However, there must have been limitations as to how far the aristocracy could have affected this change as it is thought to have continued to live and invest in their country estates.[42] The process of romanization was probably made further amenable by providing the amenities of urbanisation such as temples, piazzas but more importantly road systems, *insulae* and land. However, *tabernae* set up by continental entrepreneurs may have had a far greater impetus on this evolution than is appreciated.

Difficulties of transportation and movement were more of a barrier to merchandise than to people. Travel had its fair share of hardships and problems for the individual but so could remaining in an impoverished economic environment.[43] As migration frequently entails marginal earnings, in the hope of eventually securing suitable remuneration, then the potential rewards were greater for the young starting on a lifetime in these new urban centres. Settling down in a town with a family is usually a long-term gesture but it does not necessarily signify a permanent move. Strong ties to members of the extended family, who may have stayed behind, can make eventual return an attractive proposition unless the prospect of economic return for these sacrifices can persuade them to stay. Most migrants,

[39] Ward-Perkins, J.B. (1970) p. 19; Woolf, G. (1998) p. 46
[40] Ward-Perkins, J.B. (1970) p. 2
[41] Agr. 21
[42] Applebaum, S. (1966) p. 99; Bowen, H.C. & Fowler, P.J. (1966) p. 53; Walthew, C.V. (1975) pp. 189-205; Hingley, R. (1989) pp. 21-2
[43] Turner, G. (1979) p.469; Holsenberg, P.M. (1985) pp. 94-6

even if they manage to support a family, enjoy little economic security and will tend to opt for a minimal of expense on land purchase but especially in housing.[44]

ii) Initial Development of *Tabernae*

The simultaneous creation of hundreds of plots with modest dimensions in the towns of Roman Britain suggests the influx of a new population that is more than likely to have been of low social standing.[45] One of the fundamental questions encountered in any consideration of towns is the basis of property assignment within the area of potential urban development. This may have been through some form of competing value-gradient system, based on earnings, which allowed those with the greatest capital to purchase the prime sites. As attractive and as logical as this approach may seem it is based on contemporary economic thought, but conditions during the Roman period may have been different.[46] However, even if the land was initially allocated by some arbitrary lottery system, in subsequent periods, if not before, property could only be procured by capital. Land that was distributed by the state was often in stereotyped allotment patterns. In Italy individual colonists were assigned house sites through the process of sortition, (*sortitio*), the casting of lots. In this way a large number of people could be dealt with *en masse*. Sortition was an old practice in Rome. The casting of lots permeated Roman society and it was used to establish sequences or to assign specific benefits or tasks among equals, individuals as well as groups.[47] According to Livy the assignment of land to each colonist was derived by dividing the number of colonists into the amount of land to be distributed.[48] Other sources show that when this concerned the military, allotment distribution was determined by the quality of the land and the recipient's rank, so that plot size varied from place to place.[49]

Although there is little evidence for ownership or even for how land was distributed in these new settlements presumably the most important priority for any individual was to

[44] Gilbert, A. & Gugler, J. (1982) pp. 59-64
[45] Nappo, S.C. (1997) p. 120
[46] Vance, J.E. (1971) p. 101
[47] Gargola, D.J. (1995) p. 94
[48] 35.9
[49] Hyginus.114.1, 176.9; Siculus Flaccus. 156.7Ff; Lib. Col.211.4, 216.11, 222.12, 262.6 pro aestimio ubertatis, 232.12 pro merito cf. 232.12 20ff; 235.18; Brunt, P.A. (1971) p. 295; Duncan-Jones, R.P. (1976) p. 10

obtain suitable land to build upon. Retailers in particular were faced with the acute problem of acquiring an acceptable piece of land from which they could undertake suitable economic activities for earning a living.[50] If the buyer is starting out on life a substantial part, if not all, of his/her resources would be depleted by land purchase. Individual ownership would probably have been important in Roman Britain as ownership usually encourages improvements and this would have been an important part of the consolidation process of towns.[51] Modern studies of developing countries frequently show that a higher priority was initially given to securing tenure and a lower one to walls and roofs.[52] Without a feeling of security few people will willingly invest time and money in consolidating their dwelling and when land is bought security generally follows. In settlements where there is no threat of eviction there is plenty of evidence to show that people are well capable of improving their housing conditions.[53] If this were the case in Roman Britain initially a temporary *taberna* would be built which could be improved by stages or rebuilt in more durable materials.[54]

Shop frontages and lengths in Roman Britain were, at least initially, of relatively similar size that would seem to show a degree of economic equality between the owners of these early *tabernae* (see Chapter III.ii).[55] This also has some interesting social implications presuming that the population of these early settlements were composed of both indigenous and migrant settlers.[56]

The tastes of a householder will be strongly influenced by their previous environment and if this changes their preferences may follow suit.[57] A study of the Kelchi in Southern Belize in Guatemala gives an interesting slant on events in Roman Britain. The adoption of modern housing by the northern villages is seen as their orientation towards participation in the national economy rather than that of the tribe.[58] Strip-buildings would be nothing new to migrants from the rest of the empire but for the native Britons this could be seen as the transformation of their social field from one with the community and the

[50] Hussain, M.K. (1979) p. 104
[51] Abrams, C. (1964) p. 180
[52] Ward, P.M. (1982) p. 239
[53] Gilbert, A. & Gugler, J. (1982) pp. 84-90
[54] Anzorena, J. (1993) p. 59
[55] Collingwood, R.G. & Richmond, I. (1969) p. 125
[56] Hanson, J. (1998) p. 36
[57] Needleman, L. (1965) p. 50

kindred as primary collective, to one in which the household and the individual is the predominant unit. The strip-building may have been seen as a symbol of wealth and civilisation, and combined with the influence of urban life, could have created the stimulus for change from round to a rectangular house forms.[59]

The first person to leave the tribal centre and build a house of the imported type may have been the subject of some hostility but this progression would be less of an anguish in the new Roman settlements. It was probably those that had some form of skill that found it easiest to break with the standards of the community. The dependence on some form of earned income may have allowed the household to become independent of its kin group. As time went on others would follow the original example and more strip-houses would be constructed. In the meantime, competition for economic and social position would take place among the householders and their houses would become symbols of success.

Despite the superficial universality of the strip-building, housing is a matter of personal and local resourcefulness rather than the product of any central officialdom. In their own localities people ultimate had authority over their own housing, as investor and users. The values lie in the relationships between the individual and the building and not in the structure itself. As contemporary experiences of urban settlement in poorer countries so overwhelmingly demonstrate, people control by far the greatest proportion of resources for housing, even if this is not recognised legally.[60] Essentially, *tabernae* and housing depended on resources that only the household could use economically.[61]

As with the procurement of property the building of a *taberna,* whether it is exorbitant or inexpensive, invariably requires finance.[62] The very first *tabernae* of Roman Britain were simply built to enable speed of erection and minimal cost in both time and finance (see Chapter II). [63] During this time the progressive development of housing, or 'investment housing', would have been most obvious. This is simply the construction of a housing unit by stages, assigning a higher priority initially to securing tenure and services

[58] Wilk, R.R. (1984) p. 220
[59] Hingley, R. (1989) p. 34
[60] Turner, J.F.C. (1976) pp. 154-5
[61] Turner, J.F.C. (1976) p. 102
[62] Hussain, M.K. (1979) p. 107
[63] Wright, A. (1991) p. 16

and a lower priority to walls and roofs.[64] 'Progressive housing' rests upon the premise that an individual, with little additional work, can expand his/her dwelling as time and funds allow. For this to be effective the dwelling should conform to the following principles; 1) the house should be a liveable minimum unit that provides a good pattern for later extensions, 2) the materials used for the dwelling should also lend themselves to expansion, 3) the plot should be sufficient to permit expansion, 4) the interior should be planned so that improved facilities can be installed without difficulty.

Instalment housing was possibly the only way many individuals without savings could build their dwellings in Roman Britain.[65] Land ownership was, at least in the beginning, mainly functional affording the retailer or artisan a place to practise their trade and shelter their family rather than a capitalised one.[66] To use an example from the Diola of Senegal the first house a person builds is usually made of local and cheap materials, as they would seldom have been able to accumulate enough money to add more exuberant features.[67] In other words, what were needed in Roman Britain were utilitarian buildings that were inexpensive and less committing in their finality.[68] This is especially true of commercial buildings where any delay due to construction would have meant a loss of income and potential customers to competitors.[69]

Comparatively cheap building material in *tabernae* was immensely important during most of the first century, when long term uncertainty would have kept investment in building to a minimum. Placing capital into any single property is a risky business especially when it is impossible to determine future incomes or the development value of the site in the far or even immediate future.[70] Serious private building by individuals is generally produced by societies where there is an atmosphere of stability or dynamics because any large scale investment requires confidence.[71] As a consequence there would

[64] Ward, P.M. (1982) p. 239
[65] Abrams, C. (1964) pp. 175-7
[66] Vance, J.E. (1971) pp. 101-3
[67] Linares, O.F. (1984) p. 419
[68] Wacher, J.S. (1966) p. 79
[69] Hodges, H.W.M. (1972) p. 527; Perring, D., Roskams, S. & Allen, P. (1991) p. 81
[70] Guy, C. (1994) p. 50
[71] Farmer, B. (1993a) p. 159

have been little incentive in making any serious investment in building during such an unstable economic period even if resources were available.[72]

As migration continued housing needs would persist accordingly.[73] It was these factors, and not any consideration of how long the site would be occupied, that influenced the building materials to be utilised. Once the frontier became more settled and capital accumulated, estimated life span and the quality of materials became more important as there was a greater willingness to spend time and resources on construction.[74]

Often the dwellings that appear to be the poorest materially are the best socially.[75] The initial buildings of Roman Britain may appear to be inferior to later structures, but they were supportive of their inhabitants. There may be virtually no housing expenses at all and a low income could be spent on the most important thing of all, food. Any balance could then be saved towards future development. Barring accidents and major depressions in the economy it was very likely that individuals would improve their social and economic condition. Of all people in society, artisans were habitually exposed to the possibility of physical deformity and disability from the effects of their craft. This is especially the case in such occupations as metalworking.[76] The *taberna*-owners would have needed to maximise their opportunities for the realisation of future hopes and expectations. They would save as much of their income as possible in order to take advantage of opportunities as they arose and eventually invest in a more permanent establishment. The cost would have been balanced against income and assets and a positive imbalance would increase the household's economic security and social stability. This would in turn provide a substantial degree of protection against the risks of an accident, economic depression or political upheavals and ultimately security in their old age.[77]

Therefore, the initial strategy was probably to minimise housing expenditure and the physical quality of the shelter was secondary. The shopkeeper could then keep their options open and maximise their opportunities to gain future security. Almost any form of simple structure would suffice so long as the health of the individual or their family was not

[72] Perring, D., Roskams, S. & Allen, P. (1991) p. 86
[73] O'Conner, A. (1983) p. 166
[74] Hanson, W.S. (1982) pp. 168-9
[75] Salam, S.A. (1979) p. 3
[76] Burford, A. (1972) p. 72
[77] Turner, J.F.C. (1976) pp. 51-80

unduly threatened. Far from being oppressive these less substantial dwellings provided admirable support for their inhabitants.[78]

The amalgamated data for room usage after the foundation period for the towns of Roman Britain seem to show a substantial decline until a recovery emerges by about A.D. 100 (Figure 50).[79] This occurrence is more noticeable in Verulamium and Colchester and can largely be explained by the destruction of the towns during the Boudiccan revolt (Figure 50).[80] Besides the deaths of many of the inhabitants the result of this catastrophe was the destruction of large parts of the towns along with people's livelihoods and investments. This would have forestalled any further investment in these towns while people attempted to recover from the event. It may also have discouraged additional migration to the urban settlements. Cirencester did not suffer in the same way but even here there seems to have been a period of stagnation until it too shows a recovery by about A.D. 100 and this cannot be so easily explained. The initial boom can be explained by the migration of individuals hoping to make a better life for themselves in these new settlements. Despite the economic attraction of the new towns, this would also have been a time of great uncertainty and instability. This decline or immobility may represent a period of filtration for the settlements as the more successful households will be encouraged to develop their accommodation while the less prosperous will linger in the expectation of future returns or leave altogether.[81]

iii) Development of *Tabernae*

Even if cheap materials were used in construction to save money, the cost of maintenance probably turned out to be more expensive than the initial expenditure on construction, and these early shop-dwellings were demolished rather than maintained.[82] The development in building techniques was accompanied by the construction of mosaics, tessellated pavements, heated rooms, bathhouses and the use of more elaborate painted

[78] Turner, J.F.C. (1976) pp. 56 & 82
[79] Faulkner, N. (1998) p. 380 fig. 208.
[80] Faulkner, N. (1994) p. 97 fig. 2; Faulkner, N. (1996) p. 92 ill. 3
[81] Charles, S. (1977) p. 52
[82] Abiodun, J.O. (1976) p. 346

wall-plaster. These are all indications of the adoption of Roman standards but more importantly emphasise the advancement of wealth and higher status.[83]

It appears that values and life styles are determinants of the physical attributes of a dwelling and not the reverse. Basic needs are essential if any group of people is to survive but once these are met people begin to seek security, safety and stability.[84] Engels's Law states that people first consume food, clothing and basic shelter and only after these basic needs have been met will they consume professional services and durable goods.[85] Capital accumulation for housing should come as much as possible from sources that are non-competitive with capital needed for other enterprises.[86] This type of construction programme would have enable the household to take advantage of transitory 'peaks' of financial prosperity to consolidate and enlarge their housing units.[87] Construction work on town houses continued to rise and whether this building was carried out by individuals in a self-help capacity, or paid contractors, it represented a surplus of labour and increased prosperity.[88] This was not a universal picture as in Cirencester, *insula* V, the changes in building methods can be detected sooner in some buildings than in others. This contrast in construction methods was probably brought about by the more progressive owners investing in their dwelling.[89]

As the economy continued to develop in Roman Britain, the direct effect of income is upon the allocation of money resources. Some of the increase in income would be spent on consumables but most of it was probably invested in the house and furnishings.[90] There may be a crisis of allocation that can be resolved in many ways other than spending on houses but the investment of surplus cash into the *taberna* and fixtures is extremely pragmatic. It was a demonstration that income was not going to be wasted on superfluous items. Instead it will be spent on permanent improvements that can be used for many years that will add materially to the family's assets.[91]

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[83] Hingley, R. (1989) p. 31
[84] Hussain, M.K. (1979) p. 101; Juzak, T., Newmark, N. L. & Sodden, J. (1979) pp. 102-3
[85] Lentnek, B., Charnews, M. & Cotter, J.V. (1978) p. 292
[86] Abrams, C. (1964) p. 144
[87] Ward, P.M. (1982) p. 241
[88] Faulkner, N. (1998) p. 374
[89] Wacher, J.C. (1962) p. 11; Holbrook,N. (1998b) p. 193
[90] Lentnek, B., Charnews, M. & Cotter, J.V. (1978) p. 292; Netting, McC.R & Wilk, R.R. (1984) p. 3; Wilk, R.R. (1990) p. 37
[91] Turner, G. (1979) p. 469

The literary sources imply that land formed the foundation of most of the large fortunes in Italy. Even when an individual made their money by other means, if it was possible, it was invested in land. This is a common convention shared by successful trades people in other periods even up to the present day.[92] The best known Roman example of this is Trimalcho from Petronius' *Satyricon* who after amassing a fortune immediately invested it in land and ceased to trade.[93] Aulus Gellius states there was a high return from urban property but that the risks were higher.[94] Whether 'social' or 'economic', it may be wise expenditure simply in terms of balanced growth.[95] Housing can also play an important part in developing savings and in releasing unproductive capital into the economy. While investing in the *taberna* can solve many problems, at the same time the building may have been the only secure place to invest capital. People will save for housing even when they might not save for anything else.[96] Whatever the motivation, the habitual allocation of the household's income into the built environment further reiterates the ideology of the household and the individual above the kin group.[97]

The essential characteristic of any building is that it provides a service beyond the period in which the dwelling is built or purchased.[98] The construction and maintenance of adequate buildings, as distinct from productivity and short-term costs, require imagination, initiative and above all, personal will to care. The householder's determination to invest time, effort, skills and resources in their building and surroundings depends on the satisfaction they can expect and the usefulness of their housing.[99] Thus, it is not just current income that will be of concern, but the permanent income.[100]

Land, its provision, or lack of it, has historically always been a factor in conflicts.[101] The existence of narrow frontages in towns is conceivably one of the clearest indications of the great value placed on property size and location. Property was functional rather than capital and in such a climate location was not relative but absolute (see Chapters III.i &

[92] Burford, A. (1972) p. 30
[93] Petronius *Satyricon* ; D'Arms, J.H. (1981) pp. 15, 83-4; Wells, C. (1984) p. 178
[94] Attic Nights XV.1
[95] Abrams, C. (1964) p. 109
[96] Abrams, C. (1964) p. 110
[97] Wilk, R.R. (1990) pp. 40-1
[98] Needleman, L. (1965) p. 45
[99] Turner, J.F.C. (1976) p. 89
[100] Charles, S. (1977) p. 19
[101] Edwards, M. (1979) p. 84

V.i).[102] Retail property would be of greater value and scarcity the closer it was to the town centre and markets. Strip-buildings clearly show the commercial nature of these towns. Furthermore, their existence is exactly what would be expected in an economically successful urban community.[103]

The first reaction to higher land prices was presumably to make more intensive use of the existing *tabernae*. Sophisticated house plans do not appear in the early stages of the urban settlements.[104] *Taberna* frontages and lengths were of similar size and this may indicate a degree of economic equality.[105] The importance of space is obvious by the way in which shops were extended to the rear. The addition of appendages to the rear of premises was a common practice, and can be seen in many towns for example in London,[106] Caerwent,[107] Verulamium[108] and Cirencester (see Chapter III.ii).[109] This occurrence would seem to indicate that the individual running the establishment achieved a greater level of prosperity. This clearly emphasises individuality but also the growth of personal wealth.

Alternatively the property owner may increase the size of the dwelling not to enlarge the dwelling but simply to earn rent. In this way the income gained from a property could be intensified.[110] The initially transient urban population may have encouraged many landowners to become landlords. This occurrence has led Perring to suggest that the rooms added to the rear of Building K on Newgate Street, London, were designed as lodgings for rent (Figure 31). This is based upon the contrast of the additional rooms to the other domestic chambers. It seems to have been set apart from the main house as access to the rooms seems to have been *via* a lane to the east and not the main house.[111] At Leadenhall Court a row of similarly sized rooms, each with its own hearth, may also have been one-

[102] Vance, J.E. (1971) p. 103
[103] Millett, M. (1990) p. 107
[104] Walthew, C.V. (1975) p. 192
[105] Collingwood, R.G. & Richmond, I. (1969) p. 125
[106] Roskams, S. (1980) p. 406; Perring D. (1987) p. 150; Perring, D., Roskams, S. & Allen, P. (1991) pp. 14-7
[107] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 11-3, 17-8; (1911) p. 437; J.R.S. 37 (1947) p. 165; 38 (1948) p. 81; 39 (1949) p. 96; Dunning, G.C. (1948) pp. 93-5; Nash-Williams, V.E. (1948) pp. 56-9
[108] Frere, S.S. (1972) p. 12; Wacher, J.S. (1975) p. 386
[109] McWhirr, A.D. (1978) pp. 76-7; Holbrook, N. & Timby, J. (1998) pp. 230-9
[110] Vance, J.E. (1971) p. 109; Charles, S. (1977) p. 61
[111] Perring, D. (1987) p. 150; Perring, D., Roskam, S. & Allen, P. (1991) p. 104

roomed lodgings or bed-sits for workers.[112] Renting is seldom mentioned in the written sources.[113] However, small rooms are known to have existed in Rome that were rented by the urban poor as lodgings.[114] Regardless of the social factors that may have been responsible for these extensions they could only occur if the individual had sufficient capital to carry out such aspirations.

The cost of accommodation in the *insulae* is not known. Even if inexpensive methods of construction were used, it may be doubted whether the very poor would have been able to afford to buy housing in the new *insulae*. The only means by which they may have had somewhere to live would have been through renting rooms. The tenants of these rooms may have been of the same artisan class or the native British who, having given up or lost their land moved to the towns. Such a landless class would have been of necessity itinerant, and would have moved from place to place where work might be offered.[115] For potential landlords rooms designated for this purpose could form a suitable investment medium as it could provide an income from tenants.[116] It could also be a lucrative financial proposition as after the original investment in construction is recouped, rents on houses or rooms, besides some minimal maintenance, are pure profit.[117]

From the very earliest periods, but certainly as the Roman settlement developed, it is clear that *tabernae* often varied greatly in size and equipment. This situation would seem to imply that not all the small merchants were equally successful, and all artisans were not equally in demand. This is probably an indication of a 'free-market economy' where some proprietors prospered more than others. It would appear that competition may have been fierce among them, or more simply that the better artisans, or those that gave better value prevailed over those that were mediocre or extravagant.[118] The clearest indication of this is

[112] Brigham, T., Brown, G., Milne, G. & Wookon, P. (1987) p. 19. Identical rows of self-contained rooms such as these, are found attached to some houses in Italy, and were used to house slaves, but in such a humble house this would seem unlikely which perhaps increases the probability that they were lodgings of some sort. Perring, D. (1991) p. 55 They could also have acted as one roomed brothels. Low status prostitutes used unicellular barrack-room units. Scobie, A. (1986) p. 403 The rooms in the brothal at the junction of the *via del Balcone* and *via del Lupanare* measured about 1.8m by 1.8m. Gusman, P. (1900) pp. 226-8 Niches in Building xxviii.1 at Verulamium may also have served this purpose.
[113] Frank, T. (1933) p. 377
[114] Frier, B.W. (1980) p. 27; Scobie, A. (1982) p. 402
[115] Milne, G. & Wardle, A. (1996) pp. 49-50
[116] Guy, C. (1994) p. 49
[117] Gugler, J. (1988) p. 189
[118] Deiss, J.J. (1981) p. 117

not only the extension of premises to the rear but also the procurement of neighbouring property. This was a frequent occurrence at Caerwent[119] and also took place in Wroxeter (see Chapter III.iii).[120] The northern corner of *insula* V, at Cirencester, was composed of several strip-buildings that were developed and merged into one single dwelling.[121]

These circumstances are probably as much an indication of the later decline in the value of commercial property as they are of the increase in the wealth of the retailers that remained. In general, the pressure on frontage space does seem to have reduced with the space several strip-buildings now being occupied by a single more ornate town house.[122] However, many *tabernae* were incorporated into residential complexes and there may have been a continued growth in commercial premises.[123] The simplest explanation for these developments is that one owner was presumably more prosperous than his/her neighbours, and had bought out the less successful establishments and extended their own property across the site. The motive behind these expansions in Roman Britain was to provide a more extensive, comfortable and luxurious dwelling for the owner.[124]

iv) Stone

The continued improvement in economic conditions enables a betterment or amelioration in house types and *vice versa*.[125] For the *taberna*-owners with larger incomes the final major step was to build masonry houses. A comparable development was noted amongst the Kekchi of Guatemala who employed masons to build stone structures. For those with a smaller and more irregular income, these investments took the form of substituting better quality construction materials for inferior ones in an effort to compete with their more prosperous neighbours.[126] Whether a similar pattern occurred in Roman

[119] Ashby, T., Hudd, A.E. & King, F. (1910) pp. 7-11, 17-20; (1911) pp. 421-6, 433; Dunning, G.C. (1948) p. 94; 39 (1949) p. 97; Nash-Williams, V.E. (1948) pp. 56-7
[120] Bushe-Fox, J.P. (1914) pp. 2-9; (1916) pp. 4-20; Wacher, J.S. (1975) p. 369; (1995) p. 371; Walthew, C.V. (1975) pp. 191-2; Crickmore, J. (1984) pp. 66 & 81
[121] Wacher, J.S. (1975) p. 310 & 369; (1995) pp. 318-9 & 371; Holbrook, N. (1998b) pp. 189-211
[122] Perring, D. (1987) p. 152
[123] Jones, M.J. & Wacher, J.S. (1987) p. 35
[124] Wacher, J.S. (1974) pp. 282-3; (1989) p. 93
[125] Anzorena, J. (1993) p. 60
[126] Wilk, R.R. (1990) p. 37

Britain is impossible to distinguish.[127] What can be said is that the transition from timber, mud to stone indicates a greater degree of permanency and investment in *tabernae*.

Time and experience were needed to raise a stone wall and this required a continuing process of skilled craftwork and fine adjustment during building compared with timber.[128] Buildings composed largely of stone required more in the way of falsework, such as scaffolding for the masons, and formwork for the permanent structures, such as windows and doors. The need for formwork added appreciably to the cost of building and makes the process of erection more difficult and complex.[129] The use of stone was not just a cultural assimilation but also one of economic resources.[130] The evidence from villas in the south-west indicates that their dependence on very local material suggests that for many owners stone was laborious and expensive to acquire.[131] In short, stone meant status.[132]

The permutation to stone was not as dramatic as is often inferred. This was not a universal picture and timber was still widely used for private housing and the use of stone may always have been restricted by expense.[133] The excavations at Cirencester *insula* v emphasise that the row of timber *tabernae* opposite the market had been rebuilt in stone at intervals.[134] The initial *tabernae* and houses built largely of stone must have been the prerogative of the successful, and it was not until the fourth century that all the buildings were constructed in stone.[135]

This increasing preference for masonry construction should not be seen solely as an expression of wealth and a changing attitude to town life, but also a feeling of greater security and permanence on the part of the individual *taberna*-owners.[136] Stone gives an assurance of long life. Whenever humankind has sought to secure its most important buildings it has consistently turned to stone. Its reputation for durability is the result of

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[127] A possible example, although tentative, is a painted wall plaster from a third century shop in Catterick *insula* VII that had a decorative scheme showing the representation of marble. Davey, N. (1972) p. 261 & PL. XIXb The attempt to represent marble in this fashion is one that can be seen throughout the empire and may have become the norm rather that any aspiration to duplicate marble.
[128] Hodges, H.W.M. (1972) p. 524; Ling, R. (1985) p. 17
[129] Fitchen, J. (1986) p. 131
[130] Blagg, T.F.C. (1990) pp. 37-8
[131] Blagg, T.F.C. (1990) pp. 38
[132] Quiney, A. (1995) p. 36
[133] Crickmore, J. (1984) p. 97
[134] Wacher, J.S. (1962) p. 11; Holbrook, N. (1998b) p. 193
[135] Wacher, J.S. (1995) p. 66
[136] Perring, D. (1987) p. 168

thousands of years of experience and its resistance to fire.[137] Capital had accumulated sufficiently for it to be invested into more durable *tabernae*, that expressed the confidence of the individual in their own ability, that of their trade but also their faith in the future.

The statistical data of Faulkner support the general theory that there was a steady economic development of private dwelling in towns from A.D. 100 to 150 that peaks in about A.D. 250 and more or less levels out around A.D. 325, when there is a continuous decline until the end of the Roman settlements in Britain.[138] It should come as no great surprise that there was a gradual increase in the quality of *taberna* construction, amenities and decoration between the first and fourth centuries, with the average dwelling size steadily increasing, as this is exactly what one would expect for any individual or settlement that is prospering economically. An interesting consequence of this is not just that individuals are continually investing in their own property but that capital seems to be solely placed into property at the expense of monumental architecture especially in the later Roman period. It was the private residences rather than public buildings that enjoyed the luxuries of mosaic floors and painted walls and even bath suites.[139]

Summary

The hypothesis of this section has been that the economics of *tabernae* in Roman Britain can be examined by a study of the variations in *taberna* architecture and the use of space. Essentially a *taberna* will change and evolve to reflect the economic circumstances of the inhabitants. The foundation of the settlements of Roman Britain would have been a time of great instability, but it would equally have been a period of immense economic potential especially for the entrepreneur. If Roman Britain was to develop and to approach the material living standards experienced by other provinces, then the motivation for economic growth must lie within the inhabitants themselves. Upward mobility depends more on access to better income, security and education than it does on place of residence. Thus, it is the economic and social development of the individuals that are reflected by these dwellings and not *vice versa*. The change from timber and clay buildings, to

[137] von Meiss, P. (1990) pp. 180-1
[138] Faulkner, N. (1994) p. 98 fig 3; (1996) ill. 3; (1998) p. 380 fig. 208
[139] Faulkner, N. (1996) p. 93; (1998) p. 379

dwellings of a more sophisticated design, and the eventual adoption of stone represents the continual and increased investment in *tabernae* and towns. It further demonstrates a change in the character and attitude to town life as it indicates a greater degree of confidence, permanence and stability that was not reflected in the earliest dwellings. The striking vitality of succeeding generations is indicated by the numerous modifications to buildings and by frequent land acquisitions within only a few years of the first settlement. Generally, the *taberna* can be seen as a vehicle for the realisation of the expectations of the retailers and artisans of Roman Britain. Despite this the vast majority of *tabernarii*, who were both skilled entrepreneurs and workers, probably did not rise to high society.

Chapter VII

Taberna Counters

The most distinctive features of the known *tabernae* of Pompeii, Herculaneum and Ostia are the *taberna* counters, doors and porticoes. It was amongst these amenities that the real activities of the retail arena took place. The shop floor was the most important element of the '*taberna*-house' as it was through this area that the whole gained its identity. Without these traits most of the evidence for *tabernae* would be lost. Given the constraints imposed by the limited extant remains of Roman Britain a complete reconstruction of the retail arena cannot be made. As a consequence comparisons must be made with surviving standing examples. The excellent standing remains of Pompeii, Herculaneum and Ostia enable a hypothetical reconstruction of these activities. Although there is a great distance between Britain and Italy similarities can be found. Britain was part of the Roman empire and its buildings and how they were designed and functioned reflect this. Modern retailing studies have also been used to aid the reconstruction of the retail arena to suggest the possible function of the main features of what made a *taberna*.

While there is every reason to suspect that the open-fronted strip-structures of Roman Britain were used as *tabernae*, this is still uncertain, as no identifiable counters have been discovered in Britain. The examples of counters that have survived from the Roman period are located in Italy at Ostia, Pompeii, and Herculaneum. Substantial counters also exist in North Africa at Djemila and Timgad, in Algeria and Lepcis Magna in Libya (Figure 55). Although these were certainly selling platforms they appear to function more as stalls under a portico in a market place rather then actual *taberna* counters.[1]

The surviving Italian examples were solid and constructed of cement, brick or rubble.[2] Some were poorly built and have been lost to decay and destruction.[3] For example, many of the counters found during the initial excavations of Ostia have

[1] Wheeler, M. (1966) pp. 66-8, 136; Plates 13, 14 & 48; Manton, E.L. (1988) pp. 67 & 96, figs. 19, 20 & 45
[2] Waldstein, C. & Shoobridge, L. (1908) p. 77
[3] Hermansen, G. (1974) pp. 173 & 176; Paoli, U.E. (1975) p. 66;

subsequently disintegrated.[4] The selling platforms are usually L- or less frequently U-shaped although there are examples from reliefs of small individual counters such as that of the jewellery seller from Metz,[5] the pharmacist discovered at Lillebonne[6] and the cloth merchant from Sens (Figure 56).[7] In general, the counters are similar in design to modern examples with a worktop above, a counter base, and were about waist height.

In appearance they were stuccoed and painted but more often the surviving counters were decorated with a veneer of marble slabs sometimes of irregularly shaped fragments of coloured marble (Figure 57).[8] The counter of *Regio* I.xi.16 in Pompeii was unusual in that it was stuccoed but was left unpainted. Both *tabernae* I.x.13 and II.i.1 had painted counters. The former was red while the latter was painted with coloured squares to resemble marble.[9] *Taberna* N.6 on the *Insula Orientalis* II, in Herculaneum, has a bar that bears the remains of a decoration.[10] More ornate decorations were also found on Pompeian counters. I.viii.1 had a magnificent counter that was finely embellished with symbols and attributes of Bacchus on the side turned to the street.[11] *Taberna* II.ii.3 was decorated with a painted floral network that resembled modern painted tiling.[12]

The counters in Ostia were also covered with marble slabs on the top and sides.[13] Many of the surviving worktops from Ostia, such as the inn on the *via di Diana* I.ii.5, are believed to date from the economic decline of the third century when second-hand marble was easily acquired.[14] A shop with a counter faced in marble is located at the corner of the *Vico del Lupanare*.[15] Before entering the *Terme del Faro* there is a *taberna* with a counter of coloured marble.[16] All that survives of similar counters in the north-western provinces

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[4] Hermansen, G. (1982) p. 187; Bakker, J.T. (1994) p. 80
[5] Esperandieu 4295
[6] Esperandieu 3097
[7] Esperandieu 2781
[8] Adams, W.H.D. (1872) p. 60; Boissier, G. (1905) p. 423; Deiss, J.J. (1966) p. 99; Connolly, P. (1979) p. 56
[9] Della Corte, M. (1925) p. 37; Packer, J.R. (1978) p. 47 & fn. 99
[10] Maiuri, A (1959) p. 55
[11] Della Corte, M. (1925) p. 27
[12] Della Corte, M. (1925) p. 43
[13] Hermansen, G. (1974) p. 176
[14] Meiggs, R. (1973) p. 428
[15] Calza, G. & Becatti, G. (1958) p. 41
[16] Calza, G. & Becatti, G. (1958) p. 49

are two reliefs from Dijon (Figure 58).[17] In a sixth of the twenty-nine decorated shops, from a total sample of 143 studied by Wallace-Hadrill, the focus of embellishment was the decorated counter.[18] It would seem that the counter itself was the main focus of attention both physically and decoratively in many *tabernae*.

One of the characteristic features of *taberna* counters is that they are predominantly located right on or by the shop entrance, often blocking part of the doorway.[19] Martial describes the scene of several such *tabernae* with counters in close proximity to each located on a street.

> 'No need to ask Atrectus (that is the name of the shopkeeper): out of the first or second nest he will offer you Martial smoothed with pumice and smart with purple for three denarii.'[20]

A Gallo-Roman bas-relief from Til-Châtel, now in the Museum at Dijon mentioned above, seems to depict this exact arrangement (Figure 58b). The largest surviving part of the relief shows a possible wine shop with an open front and a counter at the threshold. To its left, although their lower portions have been lost, are two other *tabernae,* one of which appears to be that of a perfume seller and the other that of a butcher.[21] This grouping of *tabernae* is precisely what Martial is describing as nests and this custom can be found in the archaeological records throughout the empire, for example *insula* xiv at Verulamium. As the counters were frequently located adjacent to the street, so too would much of the *taberna* equipment, as the counter was also a worktop, sometimes with dire consequence.

> 'Permission being granted, he took the girl and her nurse aside to the shops near the shrine of Cloacina, now known as the 'New Shops', and there, snatching up a knife from a butcher, he plunged it into her breast, saying, 'Thus, my daughter, in the only way I can, I vindicate, thy freedom.'[22]

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[17] Esperandieu 3469 & 3608
[18] Wallace-Hadrill, A. (1994) p. 155
[19] Guhl, E. & Koner, W. (1994) p. 520
[20] Epig I.cxvii.13-17
[21] Esperandieu 3608
[22] Livy III.xlviii.5-7

In some cases customers could sit outside the *taberna* on benches. This may have been the case with *thermopolii* such as that found on the *via di Diana*, I.ii.5.[23] This was convenient for serving passing customers just outside the doorway.[24] This was presumably designed for people, who did not wish to enter the tavern, and desired a drink without stopping, or wished to fill a vessel with a beverage and drink later.[25] Premises similar to this may have functioned in a comparable fashion to modern off-licences.[26] In other *tabernae* the customer could enter the tavern, sit down at a table or bar and imbibe.[27]

As mentioned above, *taberna* counters were similar to contemporary cases and had a horizontal worktop, such as the sales counter found in *Regio* VI.iv.3-4 and other examples in I.viii.8 and IX.ix.8-9 in Pompeii[28] and IV.17 and V.6/7 in Herculaneum.[29] Many counters were more elaborate and reflected a specific function such as those thought to belong to taverns. The counters found in Pompeii and Herculaneum often enclosed large earthenware jars.[30] These are frequently argued to identify taverns or more particularly *thermopolii*.[31] These encased storage vessels are pear shaped with their maximum width at the shoulder and are known as *dolia*.[32] *Dolia* also had distinctive wide-open mouths with a pronounced lip for the fitting of a lid (Figure 57).[33] The largest *taberna,* III.xiii.14, across

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[23] Calza, G. & Becatti, G. (1958) p. 28
[24] Hermansen, G. (1982) pp. 188-9
[25] Boissier, G. (1905) p. 423
[26] White, K.D. (1975) p. 116
[27] Boissier, G. (1905) p. 423; MacKenzie, W.M. (1910) p. 29
[28] See also I.ix.4, I.xi.1, VI.x.3, VI.xiv.35-36, VI.xv.15, VI.xv.16 VI.xvi.12, VII.vii.11, VII.xii.12. Boyce, G.K. (1937) pp. 45, 58, 68, 70, 91; Wallace-Hadrill, A. (1994) pp. 192, 194, 207, 213, 215
[29] Wallace-Hadrill, A. (1994) pp. 201-2
[30] Dyer, T.H. (1867) p. 302; MacKenzie, W.M. (1910) p. 28
[31] Adam, J-P. (1994) p. 321
[32] Columella discusses the making and shape of *dolia.* The basis for this design was that when preserved food was removed for use, what remained may be pressed down with equal weight to the bottom, since the food is kept fresh when it does not float on the surface but is always covered by liquid. This cannot happen in the globular shape of a wine-jar because of the irregularity of its form (12.4.5). The other reason for this shape, according to Columella, was that it allowed for the expansion of their contents during the earliest phases of fermentation 12.44.2: Varro (37 B.C.) explained that if the wine is strong the heavy fermentation will cause the container to shatter as happened in Spain and Italy I.13.6 see also Forbes, R.J. (1965) p. 80: Pliny also discusses the shape of *dolia* for the storage of wine N.H. 14.134
[33] White, K.D. (1975) p. 145

from the Palaestra in the *Casa a Graticcio* had eight large *dolia* inserted into its counter.[34] In contrast the *taberna di Coponia* I.x.2-3, had a worktop with two *dolia*.[35]

It is recurrently stated that *dolia* were used to contain and store grain,[36] pickled vegetables,[37] *garum*,[38] wine and oil.[39] Tanzer mentions that they not only held wine but also hot stews.[40] Such ideas would seem difficult if not impractical for the *dolia* found in *tabernae*. The rationale behind such doubts is the porosity of the *dolia* and the fact that they would have required some form of treatment if they were to contain liquids of any sort. The normal remedy to waterproof earthenware containers in antiquity was to coat the inside and sometimes the outside of the vessel in pitch.[41] Pitch played an important part in the production and distribution of wine. It was almost taken for granted that any containers in which wine was stored, and particularly if it was to travel, must be thoroughly coated with pitch to make them watertight.[42]

In this process wine was poured into large earthenware vats whose interior was carefully lined with pitch and in these fermentation was completed.[43] Cato and Pliny state that when preparations were made for the vine harvest it was essential to see that all containers were pitched.[44] Columella describes the process in full and states that large and small storage jars, should be treated with pitch some forty days before the vintage was decanted into them.[45] In fact, pitch in a liquid form was used to flavour wine, being mixed with it in the first stages of fermentation.[46] Pliny says that the practice of resinating wine

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[34] Deiss, J.J. (1966) p. 99; (1974) p. 83

[35] Ling, R. (1997) p. 41. Other examples of counters with *dolia* can be seen at I.i.2, I.ii.18-19, I.iii.2, I.iii.28, I.vi.8-9, I.vii.8, I.viii.1, I.viii.8, I.xi.1, I.x.2, I.x.13, II.ii.3, II.iv.1, II.v.1, V.i.13, V.ii.19-20, V.iv.6-8, VI.ii.1 & 31, VI.iii.19-20, VI.viii.8, VI.xvi.40, VII.i.38-39, VII.v.14, VII.vi.23-24, VII.ix.22, VII.ix.49, VII.xii.14, VII.xv.5, IX.i.8, IX.i.15-16, IX.vii.24, IX.ix.1. See also Herculaneum *Insula* IV.15-16, V.9/10, IV.15-16, V.21.

[36] Cato 11

[37] Columella refers to turnips 12.56.3.

[38] Dyer, T.H. (1867) p. 303

[39] Boissier, G. (1905) p. 423; Adam, J-P. (1994) p. 321

[40] Tanzer, H.H. (1939) p. 42

[41] White, K.D. (1975) p. 145

[42] Meiggs, R. (1982) p. 468; Guhl, E. & Koner, W. (1994) p. 459

[43] Ramsay, W. (1894) p. 492

[44] Cato 23; NH 14.120-1

[45] Columella 12.18.5-7 gives an account of the pitching process and refers to the amount of pitch needed to coat a jar. He also states that *dolia* could be used for the storing of olive oil. Furthermore, Columella 12.56.3 describes how pickled turnips should be placed in earthenware jars coated with pitch.

[46] NH 14.124

was common in Euboea, Greece, southern Gaul and Cisalpine Gaul in Italy, implying that the custom was by no means universal.[47] Plutarch adds that the resinated wine from the south of Gaul was popular among the Romans.[48] Although the pitching of vessels for the storage and flavouring of liquids was widely practised it would have been difficult to carry out the former process in *dolia* fixed into a counter.

Such an operation would have been very labour intensive especially if it had to be carried out every day.[49] Even if the earthenware jars were coated before they were inserted the pitch layers would have to be renewed after the *dolia* had been used. None of the *dolia* contained in the counters seems to have been treated in this fashion. The large size and wide mouths of the *dolia* would mean that if they contained wine it would quickly sour, unless large amounts were consumed daily.[50] Pliny suggests that wine exposed to the air rapidly deteriorated.[51] Macrobius mentions the difficulty in keeping wine from going off even in full containers.[52] The lids that were used to cover over the mouths of the *dolia* would have been insufficient for this purpose unless they could create a continuous airtight seal undisturbed by usage.

Fixed vessels appear inconvenient for such a use on account of the great difficulty involved in cleaning them out. If the *dolia* held liquids some form of drainage might be expected at their bases to aid the cleaning operation that would have been important when used for serving wine. This is not just a modern hygiene concern as Columella mentions that wine vats must be carefully cleaned and washed with seawater or failing that fresh-water before use.[53] In the market place at Djemila and Lepcis Magna there was an official counter or stall for the quantification of standard liquid measures (Figure 55d). The fluid measures of volume can still be seen as a number of holes cut into the worktop to the depth

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[47] NH 14.124-125

[48] Mor. 676C

[49] Columella 12.18.5 describes the pitching process for *dolia* that are sunk into the earth which is different from that of those standing above the earth. This involved the heating of the inside of the *dolium* with iron torches, and when the pitch dripped down into the bottom of the vessel, the torch were then removed. The pitch that has dropped onto the bottom of the *dolium* or stuck to its sides is then spread around by a wooden ladle and a curved iron broom. The *dolium* was then wiped with a brush. Then very hot pitch was poured in and the vessel was covered by pitch by means of another new ladle and a curved small brush

[50] Packer, J.R. (1978) p. 47

[51] NH 14.135

[52] Sat. 7.12.15 White, K.D. (1975) pp. 146 & 180

[53] 11.2.71 & 12.18.3; White, K.D. (1975) p. 148

of the actual measures being retailed by the local merchants. Bungs must have been placed at the bottom of each orifice that sealed the liquids being measured. The stoppers were then removed to return the commodity.[54] Nothing in the form of drains or plugs has been found in the counter *dolia* of Pompeii or Herculaneum.[55] One solution to this problem was that *dolia* may have been used as a repository for a wine container that was changed when empty. Nothing of this nature has been discovered in any of the surviving counters.

It would seem more probable that these *dolia* were used as receptacles for grain, nuts or dried fruit and vegetables rather than liquids.[56] The *dolia* would have provided the cool dry environment required for storing such items. The excavations of Herculaneum back up this supposition where the remains of merchandise sold in *tabernae* have been found in *dolia*. In the counter of V.10 preserved cereals and dried vegetables were found.[57] A similar find was discovered in the *popina* of IV.15-16 in the bases of eight *dolia* set into the counter.[58] Insect infested carbonised or mineralised grain was found in the *dolia* of IV.10.[59] In the *Insula Orientalis* II.13 grain, chickpeas and beans were uncovered in counter *dolia*.[60] Nuts were recovered from the *dolia* of IV.17-18.[61] The best known tavern in Ostia, on the *via di Diana* I.ii.5, had a fresco over one of the sidebars that presumably depicts some of the goods that were on offer. These include olives in brine or eggs in a glass, a bunch of grapes, and a turnip and to the left two red cheeses -or watermelons- hung from a nail.[62] In another tavern on the *via de Mercurio*, VI.x.1, there are paintings that show patrons seated at a table being served by a young boy, while various victuals, sausages, dried fruits and cheeses hang over their heads from hooks.[63] It seems clear that different types of food were sold in the taverns and many of these were contained and displayed in the *dolia*.

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[54] Wheeler, M. (1966) pp. 66-8, 136; Plate 48; Manton, E.L. (1988) pp. 67 & 96, fig. 45
[55] Packer, J.R. (1978) p. 48
[56] Ling, R. (1997) p. 41
[57] Maiuri, A (1959) p. 44
[58] Maiuri, A (1959) p. 57; Brion, M. (1960) p. 178; Deiss, J.J. (1966) p. 99; (1974) pp. 83-5; White, K.D. (1975) plate 13c; Wallace-Hadrill, A. (1994) p. 201
[59] Maiuri, A (1959) p. 56; Wallace-Hadrill, A. (1994) p. 201
[60] Maiuri, A (1959) p. 55; Brion, M. (1960) p. 178; Hermansen, G. (1974) p. 169; (1982) p. 202
[61] Maiuri, A (1959) p. 59; Deiss, J.J. (1966) p. 101; (1974) p. 86
[62] Calza, G. & Becatti, G. (1958) p. 28; Meiggs, R. (1973) p. 428; Hermansen, G. (1982) p. 131
[63] Packer, J.R. (1978) p. 48; Adam, J-P. (1994) p. 321

The characteristic bar counters in Ostia were also composed of masonry but lacked the inserted *dolia* found in Pompeii and Herculaneum. The Ostian worktops, which have also been called the 'bar fountain', had a barrel-vaulted basin at the base (Figure 59).[64] In general, they seem to fall into two characteristic groups. The majority were freestanding counters with the vaulted basin accessible from both sides of the counter. The other type was not a counter in the truest sense as it was placed with its back against a structural wall. This also had a basin in the base that was only approachable from one side and resembled a modern fireplace.[65]

The function of these counters, as with those found in Pompeii and Herculaneum, has often been misinterpreted. It was believed that the void below the counter was an oven or a place to wash dishes. Grimal believed this arrangement to be for the purpose of cooking food in sight of the customer on a charcoal stove.[66] However, the lower portion of the opening below the counter is closed with a slab, either in front of the opening, in the case of worktops against the wall or at both ends of the free standing counters, to form a basin.[67]

It would seem that the main purpose of this tank was to secure a constant water supply. Water was needed in great quantities in bars, as few people would drink wine unless it was mixed with water, and to partake of unmixed wine was considered a sign of intemperance.[68] The evidence of lead pipes leading into some of the counters would seem to reinforce this belief. A piece of pipe was found lodged into the tavern bar on the *Via di Diana* I.ii.5.[69] *Taberna* III.i.10 had water pipes leading up to the counter and also had a drain to take the overflow away.[70] In tavern IV.ii.2 the mosaic floor had been broken up, and patched up again, to gain access to the pipes presumably for servicing.[71] This would seem to re-iterate the importance of drainage when liquids were sold from *dolia*. Pipes were absent from some of the worktops as they were located close to a well such as in

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[64] Hermansen, G. (1982) p. 125
[65] Hermansen, G. (1982) p. 187
[66] Grimal, P. (1963) p. 226
[67] Hermansen, G. (1974) p. 176
[68] Forbes, R.J. (1965b) pp. 80, 118-9; Hermansen, G. (1982) p. 190; Guhl, E. & Koner, W. (1994) p. 505
[69] Hermansen, G. (1982) p. 130
[70] Hermansen, G. (1982) p. 150
[71] Hermansen, G. (1982) p. 163

tavern 1.x.2.[72] The counter in tavern IV.ii.3, to the north of the baths, was built against the wall and also had no basin since there was a water source beside the counter.[73] No such piping arrangements have been found in Roman Britain but there can be little doubt that, if taverns existed, near-by wells would have been utilised.

These counters are often built up against a wall and step-formed shelves were placed at this end. While the types of bars varied between Pompeii, Herculaneum and that of Ostia this ledge arrangement was shared in common. The steps were presumably to support different sorts of vessels and dishes or measures for liquids and food for sale.[74] A grave relief from *Isola Sacra* confirms the function of these shelves as a recess for vessels (Figure 60). The important part of the relief is in the centre that depicts a tavern counter with a water basin. Over the counter can be seen the shelf arrangement built against the wall. Drinking tumblers are shown on the top two shelves and a jar and flask on the lower one.[75]

An interesting use of a counter is depicted on a Gallo-Roman bas-relief from[76] Til-Châtel and warrants a more detailed discussion especially due to its geographical proximity to Britain (Figure 58b). This shows a tavern with a typical projecting counter but it is unusually tall. It seems to have been fitted with apertures that passed through the worktop below the counter into the upper portion of the arcades. Into the apertures some form of funnel was placed that was passed through the bar and the funnel nozzle can be seen protruding below. The customer can be seen standing below this with a container beneath the nozzle waiting for their vessel to be filled. Behind the counter, and above the customer, is the retailer who carefully measures the liquid in a measure before serving the beverage into the jug *via* the spigot. The whole counter seems to have a total of three funnels in the worktop. Below the apertures, on what is the lower portion of the counter, are two bowls that functioned as drip trays, another is presumably obstructed by the customer's garments, to catch any residue missed by the customer or dribbling from the funnel thus saving the

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[72] Hermansen, G. (1982) pp. 132 & 189
[73] Hermansen, G. (1982) pp. 166 & 190
[74] Dyer, T.H. (1867) p. 303; Boissier, G. (1905) p. 423; MacKenzie, W.M. (1910) p. 28; Meiggs, R. (1973) p. 428; Packer, J.R. (1978) p. 18; Parslow, C.C. (1995) p. 112
[75] Hermansen, G. (1974) pp. 175-6; Meiggs, R. (1973) pl. XXVIB
[76] White, K.D. (1975) p. 116

floor. This is certainly a specialist counter as the neighbouring *tabernae* have counters that are much lower and at a height that would normally be expected.[77]

Another relief from Saint-Châpelle, Dijon, depicts a *taberna* that sold food and wine (Figure 58a). Regrettably the lower part of the counter has been damaged and the whole relief has been somewhat defaced losing some of the details. This relief also shows a bar with three funnels as indicated by the spouts below the worktop. Due to surface damage it is not clear whether the funnel nozzles were placed through the worktop. As the spouts are not in line with the decorative panels of the counter and the left nozzle is at an angle but they may have been flexible like a hose pipe and hung over the worktop. In a similar fashion as that described above, one of the two staff behind the counter is shown pouring liquid through the middle spigot into a single handled vessel held by the customer. The buyer is portrayed upright and reaching upwards with a jug to the funnel nozzle indicating that it was a tall counter similar to that on the Til-Châtel relief.[78] Although much of the actual stone has been lost a gravestone from Jünkerath in the Moselle area, now in the museum at Trier shows this custom.[79]

There are no extant parallels, nor are there any depictions, of this type of counter in Italy or elsewhere else in the empire and this may reflect a convention particular to the north-west of the empire. Why this method was used is difficult to explain, as it seems to be a rather labour intensive and arduous process that could more effectively be performed manually without the need for some form of specialist counter. Perhaps the funnels served the purpose of a strainer for either wine or beer. A relief from Nuits shows an individual decanting the contents of one vessel into another through a funnel.[80] After fermentation, and during transfer to another container, wine was filtered through perforated metal sieves or a cloth as the fermented liquid contained a great deal of dregs and other contaminates.[81] Copious sediment was also produced during storage and wine had to be strained through a

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[77] Esperandieu 3608; MacKendrick, P. (1971) p. 204 & fig. 7.13; Liversidge, J. (1976) p. 102 & fig. 40; Kempen, N. (1981) fig. 34
[78] Esperandieu 3469
[79] Esperandieu 5243
[80] Esperandieu 2053; Callender, M.H. (1965) p. 44
[81] Forbes, R.J. (1965b) pp. 77 & 117

strainer called a *colum* before it was drunk, several examples of which have been found at Pompeii.[82]

Although this system must have been convenient for customers passing for service it would have been difficult to take payment from them due to the height of the counter. Based on this it would seem that the counter was customer orientated rather than that of the retailer. This may indicate that the scene depicted is some form of charitable allocation or grant by the civic authorities or private individual.[83] The image of a medallion or bust in the top right hand corner of the Saint-Châpelle relief may confirm the latter. The *annona civica* was a dole of staple foods distributed by the state to eligible recipients in Rome. Originally this consisted of grain but eventually this was replaced by bread. Towards the end of the second century Septimius Severus added olive oil and in the A.D. 270s Aurelius added free pork and cheap wine to the *annona*. Wine was never issued free but Antoninus Pius did give out grain, oil and wine free after a crisis.[84] Whether such an *annona* existed in Roman Britain is unknown but it is know to have taken place in other parts of the empire.[85] The relief from Saint-Châpelle is particularly interesting, as it is believed to show meat hanging in the background of the counter as well as the act of distributing beverages. Furthermore, the emphasis of the illustrations is upon the actual giver rather than the recipient who has a very diminutive role below the counter, but is still in proportion, which possibly makes a statement of social ranking. Without some form of inscription it is impossible to confirm whether this was the depiction of a donation.

White on the other hand believes it to be a depiction of an off-licence where the customer brought their own container and paid for a set amount of liquid that was consumed off the premises.[86] The height of the bar may have been to prevent customers from helping themselves to goods but why this is not mimicked by the neighbouring *tabernae* in the Til-Châtel relief that has merchandise in front, on and behind the counter is

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[82] Guhl, E. & Koner, W. (1994) p. 459

[83] My thanks to Mr. John Casey Dept. Archaeology, University of Durham for making this suggestion.

[84] Ant. Pius. 8.11 cf. 9.3

[85] Tengström, E. (1974) pp. 82-8; Rickman, G. (1980) pp.187-97; Garnsey, P. (1980) pp. 56-65; (1988) pp. 225, 231-43; Jones, A.H.M. (1986) pp. 696-705; Veyne, P. (1990) pp. 237-45; Hornblower, S. & Spawforth, A. (1996) p. 604

[86] White, K.D. (1975) pp. 116-7

difficult to explain. Perhaps these products were considered less valuable and did not need as much protection.[87]

i) Roman Britain

From this over-view of *tabernae* counters there would seem to have been a development of counters types that had adapted to specific function. Despite, this the majority of counters probably consisted of a simple bar from which goods were sold. While the counters described above would seem to have been the counters characteristic of the extant remains of Pompeii, Herculaneum and Ostia but also of Gaulish reliefs, as yet, there is little evidence to indicate the existence of a similar custom in Roman Britain. One of the closest discoveries to a masonry counter in Britain was believed to have been found, during the emergency excavation at the Greta Bridge *vicus*. One of the structures was originally thought to have contained the foundation for a serving-counter just inside the entrance, implying its use as a *taberna* or tavern.[88] A possible sign of a bar was believed to exist in the southern part of Building F that flanked the main road.[89] However, the subsequent excavation and re-examination of the related evidence has shown that there is no case for the existence of any masonry counters. In fact the counter foundations were later interpreted as part of a porch.[90]

The most substantial remains for a possible counter were reported during the 1894 excavation of *insula* IX at Silchester (Figure 61). Room 3 of House III probably functioned as a shop although nothing was found to indicate its use. It seems to have been separate from the main corridor house, as there were no signs of communication between them. The width of the threshold of Room 3, which faced the street, was about 3.66m and this was occupied by a layer of tiles based on a masonry rubble foundation that was 0.61m wide. In this layer were three fairly regular breaks that the excavator felt indicated the possible posts of a shop-front and was similar in construct to counters belonging to the medieval period. The tiles may then have originally continued up to a convenient height to form a counter

[87] MacKendrick, P. (1971) p. 204
[88] Wilson, D.R. (1975) p. 235
[89] Casey, P.J. & Hoffmann, B. (1998) pp. 122-5 & fig. 8

with a space to the side for access into the *taberna*.[91] This example stands alone as the only instance of a substantial masonry counter found from the whole of Roman Britain. It is also unparalleled, as it does not seem to follow the pattern of known counters from Italy or of depictions shown on reliefs from the north-western provinces.

Despite this a counter facing the street is generally thought to be one of the normal prerequisites for a *taberna*, especially in those that sold food.[92] This is clear from Italian examples, as many of the shops revealed by excavation provide little more than a counter that opened onto the street.[93] While there are no grounds to imply the existence of stone counters in Roman Britain, this absence cannot be used to imply that counters were not common in another form.

It can perhaps be presumed that they were made of wood[94] similar to temporary stalls, such as the examples shown on the Arlon funerary relief[95] and the Ostian vegetable vendor[96] (Figure 63) or they could have been more substantial. This is confirmed by an examination of reliefs, but is especially obvious in those that depict butchers' shops, such as one in the Dresden, Antikensammlung,[97] that of Iulius Vitalis from Rome[98] and one from Ostia (Figure 63).[99] The curvature of the counters, as well as the simple fact that the Dresden relief's counter that is dated to the first half of the second century and was supported by what must have been timber legs, indicate that these were wooden (Figure 64b).[100] A masonry counter could not be used for chopping meat, and the fact that similar arrangements are still to be found in butchers' shops today, may give weight to this argument.

As there are no remaining examples of bar counters installed with funnels, described above, it may be suspected that they, as with other counters depicted on reliefs from the north-west, were built of wood. Two reliefs of grain and vegetable selling from

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[90] Pers. com. Mr. John Casey Dept. Archaeology, University of Durham (1999)
[91] Fox, G.E. (1895) p. 445
[92] Jashemski, W.F. (1979) p. 183
[93] Frayn, J.M. (1993) p. 6
[94] Bakker, J.T. (1994) p. 80
[95] Esperandieu 4045; Kempen, N. (1981) fig. 30
[96] Kempen, N. (1981) figs. 40 & 41
[97] Kempen, N. (1981) fig. 45; Veyne, P. (1987) p. 121
[98] Kempen, N. (1981) fig. 44
[99] Meiggs, R. (1973) pl. XXVIIb; Kempen, N. (1981) fig. 43

Bordeaux seem to depict counters of timber construction.[101] A *taberna* sign depicting a shop floor from Ostia shows a counter of crude composition that was in three portions and may have been adjustable and thus must have been constructed in a material other than masonry. In fact the right hand portion of the counter was a pen for hares (Figure 64b).[102] The sarcophagus of a moneychanger from Rome, dated to the second or third century, illustrates a substantial counter that is supported above the ground, implying that it was of wood.[103] Furthermore, a fresco from the house of the baker in Pompeii, now in the Naples museum, of the sale of bread is clearly from a wooden counter. The counter is long and of simple construction with horizontal timber planks held together by nails and vertical wooden beams (Figure 65a).[104]

Although less well known, counters of wooden composition have been discovered in Herculaneum due to the unique archaeological conditions. A partially excavated bar on the north side of the *Decumanus* had a wooden bar counter blocking most of the wide *taberna* door.[105] In another *taberna* on *cardo* IV a preserved wooden counter was discovered.[106] Nothing remains of the wooden counter that was uncovered in a spacious *caupona*, II.ii.3, from Pompeii.[107] In I.vi.8 an L-shaped wooden counter, now lost, was discovered.[108] Indications of timber counters can also be implied by the general layout of the shop floor. In Ostia III.xiv.1 the type of masonry counter, which was located at the back of the tavern, would presumably have been combined with a wooden counter close to the entrance.[109]

There may possibly be some indications as to the existence of counters at Verulamium *insula* xiv. The excavations in Room 6 during period IIA (Figure 3) have produced two shallow parallel slots. These slots were set some 0.98m apart, at a length of *c.*2m, and could possibly have been some 2.4m long. The object must have been

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[100] Kempen, N. (1981) p. 157
[101] Esperandieu 1097 & 1098; Higounet, M.C. (1971) pp. 79-81 reliefs 69 & 70
[102] Kempen, N. (1981) fig. 28; Veyne, P. (1987) p. 123
[103] Veyne, P. (1987) p. 145
[104] Ward-Perkins, J. & Claridge, A. (1976) p. 54; Kempen, N. (1981) fig. 29
[105] Hermansen, G. (1982) p. 186
[106] Stillwell, R. (1976) p. 387
[107] Della Corte, M. (1925) p. 73 This was formally II.v.3.
[108] C.T.P. IIIa, p. 10
[109] Hermansen, G. (1982) p. 160

exceptionally heavy, as it had sunk some 0.08m into the floor. As it was located in the middle of the front room parallel to the street it is unlikely to have been a cupboard. It may have been a workbench that suffered from constant hammering causing it to sink. The bench may have been similar to that depicted on a grave relief from Reims that shows a cobbler at work.[110] No hearth was found in the vicinity nor do any of the small finds indicate its use. It may also have been a counter, with a heavy worktop, as it was ideally placed for conducting transactions with customers who entered the shop.[111] Further possible evidence was brought to light in Rooms 20, 24 and 27 in period 1 (Figure 2), and this consisted of a row of small postholes located about 0.3m from the frontage.[112] The function of these features is difficult to determine, as they do not appear to have a regular pattern that would be expected for a counter. Room 4 during period IIC (Figure 5) has produced a row of small postholes located about 0.30m from the frontage. This is precisely the position where most Italian counters are located. In the portico in front of the possible counter a large quantity of oyster shells was recovered suggesting that this was an oyster bar.[113] Post-holes were also uncovered in front of Room 7, during Period IIB (Figure 6), and these may have supported a counter or stall under the portico that may have been less permanent due to its location.[114]

Excavations in London have also produced evidence that may have functioned as counters. In Building N/O, at Well Court, dating from the Hadrianic period, two amphorae had been deliberately set into the floor immediately inside the front wall of the stone building.[115] This arrangement was also found at Watling Court in Building K/L. These amphorae were probably used as containers, and in this function they could have been set within a wooden *taberna* counter, which served to hold the receptacles in place.[116] The fact that the amphorae were set into the ground would have taken away any stress on the wooden superstructure once the amphorae were full. Large jars were often fitted into counters and resting on the ground to serve as containers for wares exposed for sale. This

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[110] MacKendrick, P. (1971) p. 188 & fig. 7.5
[111] Frere, S.S. (1972) pp. 26-7
[112] Frere, S.S. (1972) fig. 8
[113] Frere, S.S. (1972) pp. 54-5
[114] Frere, S.S. (1972) p. 42
[115] Perring, D., Roskam, S. & Allen, P. (1991) pp. 56
[116] Perring, D., Roskam, S. & Allen, P. (1991) pp. 99, 101-2

is an arrangement already discussed in *tabernae* at Pompeii and Herculaneum.[117] At Fish Street Hill there were six buildings that were later converted into shops from warehouses. Just inside the entrances to rooms 1, 3, 4 and 6 single large North Kentish ware storage-jar were installed and the excavators have interpreted these jars as urinals.[118] However, it seems strange that they should be placed inside the premises. Urinals when they have been uncovered in Pompeii were normally located outside the building or on a street corner. Thus, it seems probable that they functioned in a similar fashion to buildings N/O, at Well Court and K/L at Watling Court.

A similar occurrence seems to have prevailed at Colchester. Building 20 was a courtyard house that had four rooms along the street frontage, two of which functioned as workshops. In room 2, during phase 2, a large flat-bottomed storage jar was discovered set upright into the ground.[119] In the north-west corner of room 2, Building 44, contained two ovens and a large pot set into the ground. Tiles were set against the jar to reinforce it. However, the jar was set on its side so that the bottom of its mouth was at ground level and this may have performed another function such as a hearth rather then as part of a counter.[120] In a workshop on the *Insula Orientalis* II.5, in Herculaneum, a furnace was created by removing the bottom of a *dolium* and cementing it to a stove.[121] These features, if they were counters, in the absence of hearths, would suggest that these structures had a commercial nature, rather than an industrial one. Despite the implications of the existence of *tabernae* counters in Roman Britain nothing has been uncovered that can unequivocally be described as a counter.

[117] Gusman, P. (1900) p. 222; Mau, A. (1973) p. 276
[118] Burnham, B.C., Keppie, L.J.F. & Esmonde Cleary, A.S. (1996) p. 427; Greenwood, P. & Maloney, C. (1996) p. 5; Schofield, J. & Malt, D. (1996) p. 12
[119] Crummy, P. (1984) p. 63 & appendix 8
[120] Callender, M.H. (1965) p. 35; Crummy, P. (1984) p. 106 & appendix 8
[121] Maiuri, A. (1959) p. 55

Discussion

There are fundamental differences in the appearance and presumably the function of the substantial counters found in Pompeii and Herculaneum and those of Ostia. The closest time span between the two contrasting sets of counters types maybe as little as fifty years but this is sufficient to reflect a practical difference. Differences are also apparent in those shown on reliefs from Dijon in the north-western provinces. The variations perhaps express a relationship between the bars and changes in Roman legislation. The Roman authorities placed many restrictions on Roman taverns such as the enactments of Tiberius,[122] Claudius,[123] Nero[124] and Vespasian.[125] Some of the legislation attempted to control the price of food, while some endeavoured to enforce constraints to the extent that all cooked food, except vegetables and cabbage, should not be sold on the premises.[126] Generally the information on the legislation is extremely limited and lacks any real detail. For instance it is unknown whether these laws were universal throughout the empire or were confined to Italy or even Rome itself. At best it does suggest, and give a possible reason for, the differences between bars that may have been rooted in political dictates and consequently in changing lifestyles.[127]

The *taberna* counter was an essential a selling tool behind which the retailer stood or sat as in the depictions from Metz and Til-Châtel.[128] Counters offered a hygienic means of dealing with food by making it possible for the customer to see at a glance the quality of the non-staple goods available on a particular day.[129] Those counters with masonry worktops would have been particularly suitable for retailing meat and fish, as they offered a solid surface for cutting and cleaning. However, as mentioned above masonry counters could not be used to chop flesh without damaging the cleaver and wooden counters were

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[122] Suet. *Tib.* 34

[123] Suet. *Claud.* 38.2; Cassius Dio 60.6.6-7

[124] Suet. *Nero* 16; Cassius Dio 62.14.2

[125] Cassius Dio 65.10.3

[126] Wallace-Hadrill, A. (1995) p. 45

[127] Hermansen, G. (1974) pp. 167-9 & 176; (1982) pp. 126, 199-203

[128] Liversidge, J. (1976) pp. 101-2 & fig. 39; Examples of standing retailers can be seen in Esperandieu Bordeaux 1097-98, Lillebonne 3097, Sainte-Chapelle 3469, Til-Châtel 3608, Arlon 4045, Trèves 7591. Seated figures in Esperandieu Bordeaux 1099, Sens 2781 & 2783, Arlon 4037 & 4043, Metz 4295, Jünkerath 5243, von Massow, W. (1932) taffl 29, 182 a1

used. Large volumes of dry goods such as grain and spices are more likely to have been sold from inside the booths, from sacks, jars, and other containers. The surviving counters were far too high for these products to be practically displayed, hence the use of *dolia* for grain, and the customer would naturally have wished to carefully inspect and handle the items. This is exactly what can be seen on a Bordeaux relief, which shows fruit being offered for sale in four open sacks, while a female customer tests grain by placing her hand into a sack of cereal.[130]

The most obvious function of the *taberna* counter was as a selling platform and for the display of merchandise. It is noticeable that in Pompeii, Herculaneum, Ostia and even in the markets at Djemila and Lepcis Magna there were outlets at which the customer stood outside the shop itself (Figure 55). This means that the majority of the stock was usually placed on and behind the counter and that the retailer was completely in control of the merchandise. The customer does not have, nor are they given, the opportunity to see and compare without any hindrance the entire range of goods available. This custom would seem to be at variance with the main objectives of modern marketing.[131] However, counter selling in permanent shops is still the most widely adopted practice today to sell expensive high-status products such as perfume and jewellery. These are sophisticated commodities that attract premium prices that cannot be sold effectively without an element of personal service. As a method of selling it is labour intensive, as it requires at least one staff member per customer. Furthermore, the amount of stock and services sold will depend on the skill, and even the mood, of the retailer and as such is relatively expensive to operate.[132] Despite these disadvantages the open counter still gave the Roman retailer ample space for the display of goods that reduced advertising costs to a minimal. Of course a counter was not the only means to sell what were presumably expensive products. A gem-cutter, close to the bakery of Sextus Patulcus Felix, in *Insula Orientalis* II.10, had a considerable supply of gems, which were displayed on a wide marble table instead of a counter.[133]

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[129] Frayn, J.M. (1993) pp. 101-2
[130] Esperandieu 1097; Higounet, M.C. (1971) pp. 80-1 relief 70; Frayn, J.M. (1993) pp. 106-7
[131] Frayn, J.M. (1993) p. 104
[132] O'Brien, L. & Harris, F. (1991) p. 42
[133] Maiuri, A. (1959) p. 55; Deiss, J.J. (1966) pp. 107-8; (1976) p. 90

Other counters allowed the customer to enter onto the *taberna* floor. In Ostia in the bar of the Baths on the Pharus, IV.ii.3, the counter was set up close to the entrance and parallel to the side wall so that there was space for the staff between the counter and the wall.[134] At *taberna*, I.i.6-9, in Pompeii the counter's front arm enclosed one *dolium* and the back arm extended into the shop and may have acted as a table.[135] Similar L-shaped counter layouts can be seen at V.ii.13[136] and I.xi.10, the *Caupona del Euxinus*.[137]

This form of counter arrangement may have offered a form of self-service shopping to the customer. This is apparent by the belief that customers were encouraged to come into the *taberna* and browse at goods that may have been displayed on the counter itself but more probably on shelves on the surrounding walls. Self-service selling in the modern sense, even on a very limited level, means that goods are collected from around the shop by the customers and the interaction with staff was limited. This may make goods seem more attractive as more time can be spent comparing them with other products and items for sale. Another form of retailing is self-selection selling. This is still predominantly self-service in that the customer is allowed to browse and select goods at will but in the knowledge that help is available should it be required.[138] It is more than possible that Roman retailers, given the arrangement of the counter within these *tabernae*, used a form of self-selection vending rather then self-service. The great benefit for the vendor with this system is that it reduces costs and problems of staff shortages.[139]

While on one level the retailer is relinquishing ultimate control over the shop floor the location of the counter at the exit means that the retailer can still see the entire stock and at the same time manage their clientele. A clear example of the attempt to get buyers into the very heart of the shop can be seen in Pompeian I.xi.16 where the L-shaped counter is at the very rear of the shop floor facing a long corridor.[140] In Herculaneum two of the

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[134] Hermansen, G. (1982) p. 162
[135] Packer, J.R. (1978) p. 9
[136] see also VI.xiv.36 & I.x.13 Packer, J.R. (1978) pp. 32-8 figs. 21-27; II.iv.1 & VI.xiv.36 see Della Corte, M. (1925) pp. 65-8
[137] Ward-Perkins, J. & Claridge, A. (1976) p. 67
[138] O'Brien, L. & Harris, F. (1991) p. 42
[139] Ornstien, E.J. (1976) p. 128
[140] Packer, J.R. (1978) pp. 16 & 20 figs. 8 & 10

tabernae, IV.10 and IV.15-16, were set away from the opening.[141] This sort of layout would mean that anyone wishing to make a purchase would have to proceed down the full length of the *taberna* and be exposed to other items on sale. In a bar or restaurant seating could be offered to potential customers and this is the ultimate example of the surrender of the shop floor. IV.15-16 had a selling-counter well inside the shop, so as to offer shelter and rest to customers instead of compelling them to remain on the pavement. There was also a back room where customers were presumably served food and drink.[142] The greatest benefit of this counter arrangement was that more customers could be served. However, the *Casa Anonima*, V.9/10, also had a back room but this was used for storage.[143] Rear rooms were also found in the *Casa di Successus* I.ix.4,[144] VI.xv.1[145] and I.vii.8[146] in Pompeii but these seem also to have been used for storage. The great disadvantage of this layout was that the majority of the store was surrendered to the customer and all the hazards that entailed.

While this is a model that fits more comfortably with the layout of bars and restaurants, as they would have encouraged customers to come in the premises, it is not as suitable for most *tabernae*. In these cases they are not spacious shop premises that in the modern sense are capable of welcoming large groups of customers into their inner recesses. Often the shops revealed during excavations, in the likes of Pompeii, provide little more than a room with a counter opening onto the street. In the majority of small manufactories floor space would have been at a premium and much of this area would have been occupied by ovens, hearths, other equipment and staff. In these cases, particularly in Roman Britain, most of the customer interchange must have taken place at the shop counter on the threshold.

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[141] Maiuri, A (1959) pp. 56-7
[142] Maiuri, A (1959) p. 57; Wallace-Hadrill, A. (1994) p. 201
[143] Wallace-Hadrill, A. (1994) p. 202
[144] Wallace-Hadrill, A. (1994) p. 192
[145] Wallace-Hadrill, A. (1994) p. 215

Summary

One of the most important components of the retail arena was the selling platform. The most extant remains of *taberna* counters survive in Pompeii, Herculaneum and Ostia. The Italian remains show that most counters had a specific function that has frequently been misinterpreted. The counters that held *dolia* presumable sold food items such as vegetables and grain rather than wine. The bars in Ostia with their water basin can more convincingly be connected with the distribution of wine. Reliefs from the north-west of the empire emphasise the specialized function of counters but in this case their purpose is unknown. There are no extant remains of counters in Roman Britain but it is very probable that they were composed of wood. In this form they may have been similar to temporary stalls found in markets or have been more substantial taking up much of the doorway in a manner similar to Italian examples or those depicted on reliefs. The location of Italian counters at the threshold would seem to indicate that the majority of the retailing activity took place at the doorway. There are indications that in some *tabernae* customers were catered for inside the establishment but this was probably restricted to taverns and restaurants. On the whole the limited space on the *taberna* floor in Roman Britain would confirm that selling took place at the threshold and that a counter was presumably placed here.

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[146] Wallace-Hadrill, A. (1994) p. 190

Chapter VIII

Taberna Doorways

The doorway to any Roman dwelling had a very important role in defining the residents' status and how those outside would treat them. Doorways that belonged to *tabernae,* with their wide entrances opening on to the street, were one of the most distinctive features of the Roman street that would punctuate someone's peripheral vision as they progressed along the street. The importance of doorways can be seen in the fact that they have been divided into two classes by Packer; those that belonged to *tabernae* and those that did not.[1] The plans of these *tabernae* has been described as being non-traditional, as they had a wide entrance to the street that did not lead into an *atrium* through a deep corridor known as a *fauces*.[2] However, this is a misleading characterisation as *taberna* entrances are as frequent as those with *fauces* and belonged to a tradition of their own.

While large open fronts seem to have been characteristic of *tabernae* (Figure 65) throughout the Empire, in Roman Britain there is little evidence to show exactly what kind of door was used to shut off this large exposed area. In Britain the walls of shops and similar buildings are almost invariably reduced to their lowest courses or to their foundations, and as a result the discovery of a complete doorway is a rarity. Thus, the only evidence for a door usually comprises a space in the wall, which hardly gives any clear indications as to its character.

Sometimes sections of doorframes are found, but this is normally only when the frame was made of stone. One complete example of a doorway was found at Great Witcombe in Gloucestershire. This frame constituted four single pieces of stone that made up the sill, lintel and jambs that was some 1.88m in height and 0.91m wide.[3] In Silchester *insula* xxvii.1 the entrance door to a house was 1.4m wide.[4] In Herculaneum the wooden

[1] Packer, J.E. (1971) p. 21
[2] Foss, P. (1997) p. 205, fn. 27
[3] Lysons, S. (1821) p. 178; Ward, J. (1911) p. 268
[4] Hope, W.H. (1902) p. 25; Boon, G.C. (1957) p. 142

double doors discovered intact in a house on the *Decumanus Maximus* (no. 19) were two metres in height and 0.8 metres in width.[5] The exterior doors of buildings in Ostia were somewhat larger. The west door of I.i.1 measured 1.3m horizontally and 3.07m in height, the entrance to stair 1 of the *Casa di Diana* I.iii.3,4 was 1.5m wide and 2.85m vertically and that of stair 1 of the *Casa di Annio* III.xiv.4 was 1.8m by 2.75m. Interior doorways were usually smaller and normally averaged 2m in height and 1m in width. The west *taberna* door of V.ii.13 is typical and measured 2.1m by 0.95m.[6] Caerwent is one of the best places to study doors in Britain as many of the houses had stone-sills. These stone-sills had recesses in them for door pivots and boltholes and their average threshold width was 1.37m. The doors were not attached to doorposts by hinges but turned on wooden pivots covered with iron or bronze in that creaked as they opened.[7] Further evidence can be seen in a second century cellar from a shop at Verulamium. What is of great interest is that one of the doorsills still retains the sockets for the pivot and bolt of the door.[8] The door pivots would have been set into both the stone sill and lintel. The indentations in these sills show that doors were single- or double-leafed and the overall impression is of the latter.[9] It would seem that the Romans disliked single-leaf doors and had a preference for double or even folding doors. This was not confined to external doors but can be found internally in the houses of Pompeii and Herculaneum.[10] This was not always the case as House VI, in Caerwent, is an example of a single door that belonged to a threshold some 1.52m long with a single pivot hole on its eastern side.[11] Other doors in Britain had no pivot holes so the doors may have been strap-hinged. Based on this evidence it would seem that the doors of Roman Britain were comparable to those in the rest of the empire.[12]

It is the greater size of the doorway that identifies a *taberna*.[13] In Ostia one of the largest doorways is 5m wide and belonged to the north-west shop in the *Caseggiato di Bacco e Arianna* III.xvii.5. The doors on the northern façade of III.xvi.3 which opened

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[5] Adam, J-P. (1994) p. 295
[6] Packer, J.E. (1971) p. 22 see also fn. 9
[7] Lucretius II, 449-50
[8] Wheeler, R.E.M. & Wheeler, T.V. (1936) p. 80; Liversidge, J. (1968) pp. 80-2; Boon, G.C. (1957) p. 143
[9] Ward, J. (1911) pp. 270; Liversidge, J. (1968) p. 80; Paoli, U.E. (1975) p. 60
[10] Riddle, J.E. & Arnold, T.K. (1872) p. 273; Connolly, P. (1998) p. 30; Guhl, E. & Koner, W. (1994) p. 465
[11] Ashby, T., Hudd, A.E. & Martin, A.T. (1903) p. 403
[12] Liversidge, J. (1968) p. 80

onto the *via Nord della Casette-Tipo* are half that size. The average width seems to be 3m and can be seen along both sides of the northern branch of the *Cardo Maximus*. In Pompeii the entrances to *tabernae* were about two to three metres wide.[14] Similarly the vertical proportions of *tabernae* doorways are just as large. A west door in I.v.2 is 3.5m high, a northern entrance to one of the shops in the *Caseggiato della Fontana con Lucerna* IV.vii.2 is 2.9m and those of the *tabernae* along the north façade of the *Caseggiato del Balcone* and *Ligneo* I.ii.6 are 3.15m.[15] When examining the height of doors in Italy it should be noted, that in Ostia for example the average height of the ground story is known to be 3.5m,[16] while the vertical proportions of buildings in Roman Britain are open to speculation.

Most of the Ostian shop doors had stone thresholds, as at Caerwent, but the open-fronted buildings at Ostia have been reasonably confirmed as *tabernae*. The greatest advantage gained by the study of doorways in Ostia is that not only do the thresholds survive but also the lintels. These doorframes were composed of travertine, marble, brick and wood. Wooden frames would have rotted long ago. However, in *taberna* III.iii.1 at Pompeii the remains of the wooden architrave and doorposts were preserved in their ancient places,[17] and the fragment of one is preserved in cement on the east door of Shop 3 in the *Caseggiato dell'Ercole*, IV.ii.2, in Ostia.[18] Two shops in the *insula* of the *Casa del Menandro* at Pompeii, I.x.3 and I.x.13, were originally reported by the first excavators to have had wooden thresholds, although no trace of these remain. *Regio* I.x.6 may have had a wooden threshold supported by blocks of lava and Sarno stone.[19] In Pompeii and Herculaneum a groove can be found to run along the bottom of the threshold, but in Ostia a corresponding aperture can be seen at the top in the lintels. These equidistant grooves clearly indicate how the raised outer edges held the vertical wooden shutters secure which the shopkeepers used to close their places of business at night (Figure 65b).[20] Shutters consisted of separate wooden planks that once placed side-by-side in the threshold and

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[13] Waldstein, C. & Shoobridge, L. (1908) p. 77; Guhl, E. & Koner, W. (1994) p. 366
[14] Connolly, P. (1998) p. 54
[15] Packer, J.E. (1971) p. 21
[16] Meiggs, R. (1973) p. 240
[17] Della Corte, M. (1925) p. 44
[18] Packer, J.E. (1971) p. 23
[19] Ling, R. (1997) p. 337

secured formed the door. At one side of the threshold is a rectangular depression or flat sinking. This hollow permitted the shutters to be removed or slipped easily into place. When the shutters were in place the area of the recess served as a secondary threshold that marked the position of the 'night door', a smaller door that swung inwards on its own hinge attached to pivot holes and quadrant-shaped marks in the threshold and lintel.[21] Set within the main entrance, the 'night door' gave admittance to the proprietor and their household after business hours.[22] The doorsill of a *taberna* at Pompeii VII.xii.11 clearly shows the groove for fixing the shutters in front of the counter and the passage left for the 'night door' at one end.[23] Another example can be seen at I.x.9.[24] On the *Nova Via, Clivus Victoriae* and Trajan's forum this arrangement can be found.[25] It seems that most of the doorways into the *tabernae* of Pompeii, Herculaneum, Ostia and Rome were arranged so that the 'night door' was to the right of someone entering the premises, while the sliding shutters were on the left covering the counter.[26]

In Augst, Switzerland, on the corner of *insula* xxiii two large doorways opened from the street into what are thought to be *tabernae*.[27] This type of open fronted *taberna* with grooved sills can be seen along the *rue Centrale* at Vaison in Roman Gaul.[28] One of the best known examples in Roman Britain is the masonry threshold of a late second century *taberna* at Housesteads (Figure 66a). Two massive stone slabs formed the western front end of the Second Building (Vicus II). The slots were separated by a gap that probably contained a block of masonry. The northern slab shows signs of considerable wear, and clearly marked the position of the door. This would seem to indicate that the western front was left open, but for some sort of wooden erection, perhaps shutters.[29] Another threshold found below House XIIIs, in Caerwent, was 1.98m wide and consisted

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[20] Adams, W.H.K. (1872) pp. 58-9; Packer, J.E. (1971) p. 21; Ward-Perkins, J.B. (1981) p. 46; Bakker, J.T. (1994) p. 80

[21] Lessing, E. & Varone, A. (1996) p. 108

[22] Middleton, J.H. (1892) p. 192; (1892a) p. 33; MacKenzie, W.M. (1910) pp. 27-8; Packer, J.E. (1971) p. 22; Mau, A. (1973) p. 276

[23] Adam, J-P. (1994) p. 320 fig. 730

[24] Ling, R. (1997) p. 337

[25] Middleton, J.H. (1892) p. 192 & note 1; (1892a) p. 33

[26] Hermansen, G. (1982) p. 204 note 9

[27] Liversidge, J. (1976) pp. 47-8 & fig. 10

[28] Liversidge, J. (1976) pp. 54-5

[29] Birley, E., Charlton, J. & Hedley, W.P. (1932) pp. 228, 231; Crow, J. (1995) p. 69

of two slabs of sandstone. This groove was thought to have been grooved to take a wooden doorframe[30] but could equally have been used to support wooden planks. A broken sill C that survived to a length of 1.5m also found in Caerwent had one rebated end to receive the end of a jamb. It had a groove to receive a wooden sheath about 0.05m thick. There is no bolt or pivot-hole and presumable the slot was used to support a shutter.[31]

The entrance of room 18 of the fourth century building V.7 in the western corner of *insula* V in Cirencester also displayed evidence of the use of shutters in the threshold.[32] Another example was found at Catterick (Figure 66b). The threshold of one building consisted of four rectangular stone blocks. A narrow slot that ran in front of the rebates indicated where the vertical posts stood to support the door. Behind the rebates a slot was cut along the threshold and this would indicate the position of the wooden shutters.[33] In Kenchester at the extreme west of the 1912-13 excavations were two well-built structures. The entrance to the larger of the two buildings had a grooved stone threshold that measured 2.7m wide. The threshold was composed of two stones, the larger one still bore the marks of a mason's chisel, while the smaller one was quite smooth, showing that it had suffered more wear. The longitudinal groove, which stops abruptly at the end of the longer stone and the absence of any boltholes, made it difficult for the excavator to imagine the character of the door that hung above it.[34] However, it is possible that the groove held vertical shutters, while the smooth stone was the location of a 'night door' that was hung on strap-hinges. As the nature of the buildings is unclear it makes any such claim tenuous.

Where stone was scarce the obvious choice for the builder was to construct the jambs, lintels and thresholds in timber, and the presence of wooden door-sills has been indicated in Silchester by nails lying on the mortar foundations.[35] Evidence of a shop front is thought to have been encountered in Room 6, at Verulamium *insula* xiv during Period 1 (Figure 2). In the front of the room a large post-hole was found in a comparable position to indicate that this shop lacked a front wall. The inference from this is that the *taberna* had

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[30] Ashby, T. (1905) p. 308
[31] Ward, J. (1911) pp. 269-70
[32] Holbrook, N. (1998) p. 230
[33] Wacher, J. (1978) p. 88 fig. 28; Burnham, B.C. & Wacher, J.S. (1990) pp. 18, 45-5, 114-5
[34] Jack, G.H. (1916) p. 28
[35] Liversidge, J. (1968) p. 80

an open front but how this was closed over is unclear.[36] At Regis House a water front building was discovered that was thought to have originally been a warehouse and later converted into shops. This consisted of six separate two-storey bays, each 4.5m wide and 10m long. The top baulk of the quay's rear wall was incorporated into the south-facing threshold of these bays. These timbers had a narrow vertical sided gully or trench along the bottom and sides of which were traces of timber planking. This was originally interpreted as a drainage gully, although it is now clear that this trench supported removable timber shutters or folding doors to cover over each individual bay opening onto the wharf.[37] Slotted thresholds such as these were also common in warehouse buildings such as the masonry sill in the *Horrea Agrippina* that showed significant signs of wear.[38]

As the merchandise of a *taberna* was displayed on a counter that frequently occupied the whole width of the shop-front, except for an access passageway, at night traders had to ensure the protection of their goods by putting up a detachable wooden shutter. The character of these *taberna* doors can be seen on the *via dell'Abbondanza.*[39] The exact imprint of one of these doors has been preserved in the volcanic ash at the entrance to several shops. In IX.vii.10 the volcanic dust hardened around the lower parts of the *taberna* door, that it was possible to make a cast of it by pouring Plaster of Paris into the cavity left by the wood known as the 'Fiorelli process' (Figure 65a).[40] A similar moulding was also taken of III.iii.5[41] and a partial one of II.v.1.[42] With this, as well as the evidence of the thresholds, it has been possible to reconstruct the shop doors' probable appearance. A *taberna* shutter consisted of a series of vertical interlocking planks that were slotted into the threshold and slid along the grooves in the threshold, described above, and a single-leaf door opening inwards completed the portal.[43] This method would be logical in a shop front, as doors opening inwards or sliding across would create the maximum frontage to the street. If they were to open outwards they would either swing into a neighbouring

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[36] Frere, S.S. (1972) p. 13
[37] Bateman, N. & Milne, G. (1983) p. 222; Brigham, T. , Watson, B., Tyers, I. & Bartkowiak, R. (1996) p. 38; Schofield, J. & Malt, D. (1996) p. 11; Brigham, T. (1998) p. 27; Brigham, T. & Watson, B. (1998) p. 45
[38] Rickman, R. (1980) pp. 94-5
[39] Ward-Perkins, J.B. (1981) p. 146
[40] Middleton, J.H. (1892) p. 192; Englemann, W. (1929) p. 146; Connolly, P. (1998) p. 12
[41] Della Corte, M. (1925) p. 46
[42] Della Corte, M. (1925) p. 68

taberna, or open into the thoroughfare and become an obstruction, unless of course they folded back onto a party wall.

Evidence from Ostia and Pompeii indicates that other doorways, for example the main entry into apartment houses, also normally opened inwards.[44] A stone sill from a domestic building in Silchester xxxiv.1 had a raised edge on its outer side to prevent the door swinging outwards as in the Italian examples.[45] Plutarch mentions that to celebrate his victory over the Sabines and to complement his triumph, Marcus Valerius was honoured with a house built on the Palatine at public expense. Whereas the doors of other houses opened inwards, the Romans constructed his doors to open outwards into the street and thus intimate their perpetual public recognition of his merit by forcing them continually to make way for him.[46] When the *taberna* was opened for business the rectangular depression in the threshold would have permitted the shutters to be slotted easily out of the way.

Once all the planks had been put in place, and the 'night door' closed, the large open doorway would be completely covered concealing the *taberna* from the outside. In the doorways of I.vi.7 and IX.vii.7 on the *via dell'Abbondanza* metal pieces that consisted of bars, rings, locks have remained in place enabling a complete reconstruction of a shop door. The shutters were locked by two horizontal bars that were passed through rings riveted either on the inside or the outside of the planks and embedded in the door jambs securing both doors.[47] These were then locked together with a padlock so that the shutters could not be pulled out.[48] On the *taberna* doorway of I.x.9, in the *insula del Menandro*, the possible bar-holes remain in the jambs that were probably used to secure access to the shop from the inside. Both I.x.6 and I.x.17 on the other hand were secured from the inside by a transverse wooden bar lodged in holes in the jambs.[49]

Juvenal points to the unattractiveness of *taberna* fronts at night, so that the streets were dark and frequented by thieves and ruffians.

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[43] Middleton, J.H. (1892) p. 192
[44] Gusman, P. (1900) p. 254; McKay, A.G. (1975) p. 90
[45] Hope, W.H. (1907) pp. 432-50, pl. xl; Boon, G.C. (1957) p. 143
[46] Poblicola XX.1-2
[47] Guhl, E. & Koner, W. (1994) p. 465
[48] Packer, J.E. (1971) p. 22; Connolly, P. (1998) p. 54; Adam, J-P. (1994) p. 321 see also fn. 41
[49] Ling, R. (1997) p. 337

> 'That is not all you fear. When your house is shut, when your shop is secured by chains, when every shutter is fastened, and all is silent, there will still be somebody there to rob you. Sometimes a villain will suddenly do the job with a dagger'.[50]

This further shows that locks, bolts and chains secured shop doors. Reconstructions based on door casts indicate that the shop doors were exceedingly heavy.[51] Both literary and archaeological evidence show that the process of shutting up shop would seem to have been a laborious and noisy operation.[52] Shutters were cumbersome and up until the early nineteenth century they were normally carried in and out by apprentices at the beginning and end of each day. Until the introduction of iron roller shutters in the 1830s shutters were a universal feature of a shopkeeper's life.[53] Doors not only welcomed people; they can also keep people out.[54] Locking up the *tabernae* would naturally be an important security precaution for anyone living within the building, to make themselves, their family and their goods reasonably safe against the night and the menaces it held over them.[55] How secure these arrangements were is unclear. Nero often distinguished himself in his nocturnal pursuits by breaking down *taberna* doors and then setting up a market a sell their wares as booty.[56] While this shutter arrangement was common to most shops, it does not in itself identify the nature of the trade within; this requires the examination of special installations, furniture, signs or even an inscription.[57]

In contrast to the normal *taberna* entrances, detailed above, *taberna* I.x.10 in the *insula del Menandro* did not have shutters. Instead a door system that turned on pivots was used but no trace of the locking or bolting systems remains.[58] A similar technique can be seen in the Byzantine shops at Sardis. The portals were smaller and varied in width considerably and averaged about 1.3m. The thresholds were usually made of one solid slab of marble but occasionally they were more than one piece. Apertures set into the left and

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[50] III.302-4
[51] Tanzer, H.H. (1973) p. 36
[52] Other references to shop doors can be found in Etymologiae 15. 2. 43-4 and Horace, Sat. 1.3.131
[53] Powers, A. (1989) p. 6
[54] Barr, V. & Broudy, C.E. (1986) p. 20
[55] Firebaugh, W. C. (1923) p. 210
[56] Suetonius. Nero, 26
[57] Adam, J-P. (1994) p. 321
[58] Ling, R. (1997) p. 337

right sides of the sills for iron door pins show that the doors were bi-valve as opposed to shutters. An iron socket for the door pin was even found *in situ* in shop E7. Depressions in the centre of the sills were intended for lock pins for the doors and these were probably made more secure by a bolt on the inside. The front edge of the threshold was raised, as in the Italian examples, to prevent the doors from opening outwards.[59] Similarly at Priene in the fourth and third centuries B.C. the shops did not open on their whole front as in Pompeii, but merely by a door.[60]

While the mode of shutting up shop may have been different, this type of open doorway fronting shops and workshops can also be seen in the medieval period throughout Europe for example in Beaugency, Cluny, Montpelier, Orvieto and Pisa. An eighteenth century engraving shows open shop frontages on the *via del Proconsula*, Florence.[61] A contemporary instance of these can be seen in the *via dei Tribunali* in Naples[62] and in Lincoln. The latter example can be dated back to the twelfth century. Jew's House, 15 The Strait/1 Steep Hill, is one of the most intact examples of a twelfth century town house in Britain. The original plan of the structure consisted of three shop fronts that spanned about 2.4m each. Although the open arcades have been covered over and the internal plan rearranged the building still functions as a shop today.[63] This open front arrangement in shops even survived in rural Italy up to at least the 1930s.[64]

Discussion

Any interpretation of open-fronted strip-buildings as *tabernae* must be made with caution. However, there are a number of practical reasons as to why these were more likely to have been retailing structures rather than domestic allotments. One major problem that

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[59] Crawford, J.S. (1990) p. 9 who also quotes an example at Corinth, xvi 100 fig 11; cf Packer, J.S. (1971) pl. 37 fig. 100 shop 1 Reg. I.xi.2, 3.
[60] Harsh, P. (1935) p. 42
[61] Boethius, A. (1960) p. 141 fig. 76
[62] Boethius, A. (1960) p. 608 fig. 86
[63] Harris, R. (1993) pp. 24-8 My thanks to Dr. Pam Graves, Dept. of Archaeology, University of Durham for pointing out this example.
[64] Boethius, A. (1960) p. 148 fig. 80

would be encountered in attempting to close over this large open space would be heating. These buildings must have been extremely difficult to heat and keep warm. Draughts would further exacerbate this dilemma, as such a large door could not have been made from a single piece of wood. Heating would naturally be a very important consideration in a country like Britain, and this is evident by the frequent finds of hearths.

While this large open space created many practical dilemmas, it had the advantage of advertising work in progress, and at the same time providing ventilation, which was essential in any workshop. Most work would have been carried out in the open fronted shops, but the smelting of metal and the heating of crucibles was probably done outside, due to the highly noxious fumes and the risk of fire.[65] In cold areas, particularly in the winter, light and radiation were desirable, and although large openings may create problems of cold and heat loss, they were used.[66] The doorway itself allowed more light into a building than any window-type.[67] Daylight, rather than artificial light, is more important for architecture because of its quality rather then its quantity. Sunshine illuminates directly and produces more diffuse lighting when reflected from walls, floors or ceiling.[68] The illuminating efficiency of a window is greatest when it is located near the ceiling. Thus, the most economical light source would be positioned near the ceiling if it did not have to take into account other factors. The doorway therefore encompasses three design functions, that of light, that of view and that of articulation between interior and exterior.[69] The sheer effort needed to open and close these doors would also have rendered this type of doorway impracticable for domestic use. While many of these open fronted strip-buildings have been interpreted as retail buildings from the finds within the structure, on the weight of these practical considerations it would seem possible that even ambiguous buildings that lack finds to suggest their purpose, with these features, had a retailing function.

The façade of a building and more precisely the threshold of a *taberna* represent the interface between the interior and exterior in its simplest form. As von Meiss states the 'threshold provide both separation and connection, or, in other words, differentiation and

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[65] Liversidge, J. (1968) p. 205
[66] Rapoport, A. (1969) p. 101
[67] Louw, H. (1993) p. 300
[68] Neuckermans, H. (1993) p. 362
[69] von Meiss, P. (1990) p. 3

transition, interruption and continuity, boundary and crossing'.[70] It can offer a high degree of privacy and seclusion to those who shelter behind it, and at the same time may strengthen the sense of exclusion for those who perceive it from the outside. By contrast a façade which appears to suggest opportunities for passing easily between outdoors and indoors, while it may be less effective as a protective screen, is likely to be more appealing to the outsider. Any unambiguous visible entrance, or any kind of breaches in a wall that suggest opportunities for admission, can discharge such a symbolic function. Doorways provide the most usual and obvious invitations to admission, since they have manifestly been provided for precisely that purpose.[71]

The doorway is and was the typical arrangement for handling an opening in the structure of load bearing walls. The threshold was a place for passing through; it framed an exterior view and was a source of light and air. The larger the opening became the more it designates 'an absence of wall'.[72] A doorway should foster a sense of belonging by the design of the threshold experience.[73] Since the threshold is the area at which people arrive and depart to and from the building it became a place associated with ritual functions and occasions.[74] The threshold was a break in the wall's structural continuity, and as a consequence becomes a place of vulnerability, fragility and spiritual sensitivity.

The threshold had tremendous symbolic importance for the Romans and this aspect was enshrined around the Latin god Janus. Ovid states in his Fasti that 'the month of Janus comes first because the door comes first'.[75] His importance and the emblematic role of the door is emphasised in the opening book of the Fasti when Janus is made to say 'Every door has two fronts, one on either side, of which the one looks out upon the people, but the other looks inward upon the household shrine; and as the gate-keeper among you mortals, sitting near the threshold of the front of the building, sees both the goings out and the comings in, so do I, the door-keeper of the *vestibule* of heaven, at the same time look forth upon the regions of the east and the west'.[76] The two-faced Janus was not only associated with

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[70] von Meiss, P. (1990) p. 148
[71] Appleton, J. (1993) p. 74
[72] von Meiss, P. (1990) p. 108
[73] Crowhurst-Lennard, S.H. & Lennard, H.L. (1993) p. 40
[74] Plummer, H. (1993) p. 369
[75] Fasti II.51
[76] Fasti I.135-140.

doorways but also the beginning or the very threshold of events by which one embarked on every enterprise.[77] The passage through a doorway, whether going inwards or outwards, is to begin something, and beginnings are heavily charged with magical significance. A house was only as secure as its door. Janus Patulcius opened the door, Janus Clusivius closed it, and these actions exposed the privacy of a home into the chaos of the outside world. Whether the opening and closing resulted in good or evil for the person concerned depended on Janus' favour.[78] Therefore, it is not surprising that the doorway that let the Roman into or out of their home had special significance that took to itself a god of doorways.[79]

The doorway was a sign of openness while its door and threshold were a manifestation of controlled access.[80] Doorways provided the most obvious and usual invitations to entry since they were manifestly provided for precisely that purpose.[81] It strengthens the visual link between inside and outside and thereby fulfils a particular aesthetic ideal.[82] A doorway promulgated the convocation of two domains, between the natural and artificial environments, order and chaos and the interface between public and private. The threshold has been interpreted as a continuity of space, shifting the emphasis from one space to another, the part of the building that relays the intramural to extramural and *vice versa*. As space existed on either side of a wall, and this demarcation was trespassed by a doorway, disjunction and connection were temporaneously at work.[83]

The doorway also had a protective role. It offered a choice between exposure and observation from the outside world to shelter from unwanted extraneous scrutiny. In order to preserve privacy the entry of a dangerous, aggressive and noisy outside world was prevented. The effectiveness of this arrangement depended on the difference between the external and the internal spheres. This disparity has two aspects, one physical and the other social.[84] Thus, the placement of *taberna* doorways and the use of the street frontage would

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[77] Holland, L.M. (1961) p. 270
[78] Ogilvie, R.M. (1969) p. 11
[79] Rose, H.J. (1948) p. 31
[80] Onians, J. (1993) p. 511
[81] Appleton, J. (1993) p. 74
[82] Louw, H. (1993) p. 300
[83] van de Ven, C.(1980) pp. 5-7
[84] von Meiss, P. (1990) pp. 148-9

seem to reflect how the urban environment was used and interpreted. Furthermore, the frequency of *taberna* doorways opening onto a street directly reflected the level of social activity and interaction that occurred on that thoroughfare.[85]

A similar desire for privacy in a Roman form can still be seen in some modern French towns. This is taken to considerable lengths in Provins where houses of all types present blank walls or heavily shuttered windows to the street. The effect of this is to emphasise the public and private dichotomy. As a consequence of this even the wealthier houses are in a poor condition externally although immaculate and well furnished inside.[86] Similar patterns can be seen in Pompeii. The front walls of the houses were plain and painted white, with a lower panel of usually red about two meters high, but these were frequently covered in graffiti.[87] The whole contrast between types of doorways is particularly interesting when a *taberna* and *domus* were part of the one façade. While the *taberna* looked outwards into the street the normal domestic house was inwards facing. The *taberna* gave no privacy nor was it intended. As Vitruvius points out the piazza was the poor man's atrium.[88] In the *Casa di Sallustio*, VI.ii.4, the two types of dwellings were combined into one, so that there were two forces at work one pulling inwards and the other pushing outwards. As a result a double tension was created and the façade was in a constant state of flux.[89]

It would seem that it was normal for the Romans to keep the main door of their homes open during the day. When Camillus entered the city of Tusculum he observed that all the house doors were open and that the shops had their shutters off.[90] During the festival of the *lectisternium* in Rome, for eight days doors throughout the city stood wide open, food was left out and all comers were welcomed to the houses.[91] This open door policy emphasises that the contrast between public and private was not so clear-cut in Roman society, as the household was the focus of both public and private life. This juxtaposition should not be seen as being wholly quantitative but as qualitative. It was a measure of how

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[85] Laurence, R. (1994) p. 89; (1995) p. 67
[86] Oliver, P. (1987) p. 194
[87] Della Corte, M. (1925) pp. 3-5; Connolly, P. (1990) p. 30
[88] VI.v.1
[89] Carrington, R.C. (1936) p. 68
[90] Livy 6.25.9.
[91] Livy 5.13.6-7

one defined the other rather then the comparative importance of each. Individuals did not stay at home to shield themselves away from the public eye but to present themselves in the best popular light. When Livius Drusus built his house he wished to arrange his house so that everything he did would be visible to everyone.[92] His successor at the property, Cicero, was of the same opinion.[93] Except when the doors were closed at night or shut as symbols of mourning[94] the front doors of the houses of the noble stood open and the inside of house and activities therein were exposed for all to see. The open doorway offered a medium for the display of the status of the occupier. The spectator in the street would be provided with a visual narrative of the house, which would present information concerning the status, moral standing and dignity of the occupier.[95] The Roman house, to the modern observer, was the stage for extremely diverse activities, much of which would seem to fit more comfortably in the public domain rather than the private sphere.[96]

This form of public display is exemplified by the *taberna* with its broad open doorway offering the widest possible exposure. The retailer must make sure that the public will recognise the *taberna* for what it is. This could be achieved by placing a sign above the entrance. In reading the sign passers-by would learn what type of establishment the *taberna* was, and would realise that the information conveyed to them was done so intentionally by whoever placed the sign. Alternatively, the customer may be informed of the nature of the place merely from the sights, smells and sounds obtained from peering through its door as they pass by. In this case, no design intention was apparent and none would be inferred. The meaning would be the same but it would result from an indication conveyed by indices. In one case the patron was 'told' that this was a *taberna*, and in the other, must make the cognitive discovery. Design intentions exist in both examples, but the semantic function is most successful if the interpreter remains unaware of its intentionally.[97] In this way the doorway was seen as progressive as it enhanced display.[98]

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[92] Velleius Paterculus ii.14.3
[93] Cicero *de domo* 100
[94] Valerius Maximus 5.7; Seneca Cons. Ad Liv. 183; Vit. Beat. 28.1; Brev. Vit 20.3; Cons. Ad Polyb. 14.2; Lucan 2.22; Tacitus *Ann.* 2.82 & *Hist.* 1.62.
[95] Wallace-Hadrill, A. (1988) pp. 45-6; (1994) pp. 4-5; Laurence, R. (1994) p. 88
[96] Thébert, Y. (1987) pp. 320-1
[97] Bonta, J.P. (1993) p. 522
[98] Louw, H. (1993) p. 300

The *taberna* front served as a showroom as well as a workroom and its entrance gradually enlarged so that people passing by could see what was happening within. Using the building façade in this way, the merchants could focus on the display of their goods and trade, to make people on the street aware that the *taberna* contained something worth looking at as well.[99] The customer walking along the road looked at the sides of the street, the surfaces of which were active economic zones.[100] It would seem that it was the nature of the Roman urban economy that made the street façade permeable.

A study of the nature of door openings makes apparent the symbolic contrast between what was regarded in Roman society as 'noble', and 'sordid', apparent. The Roman dwelling was fluid, whether it was the humble *taberna* or the expansive *villa urbana* constantly penetrated by the outside world. The vulgarity of trade is obvious from the very *taberna* front itself, with its large open façade, and the promiscuous way in which its shutters were spread widely apart, revealing its private innermost parts, and exposing items for sale to be handled by all comers. This was done in the most blatant fashion for the visual and public exchange of money. This differed greatly from the more dignified homes of the social élite with their narrow entrances, which, unlike the shop door, excluded the multitudes, and marked those that entered as being privileged and having some dignified purpose.

In contrast the atrium house, and presumably the courtyard house in Britain, was designed to be viewed through a hallway known as a *fauces*. Regrettably the insubstantial remains of the courtyard house do not allow a direct comparison with those of the *villa urbana* except through plans. Romano-British examples of this type of house can be seen in *insula* 1 at Gloucester[101] and in Blue Boar Lane in Leicester.[102] Building xxviii.1 is an incomplete instance of a courtyard house at Verulamium[103] and III.2.[104] Other examples have been noted in Wroxeter *insula* viii, site vi,[105] houses 2, 7,[106] 3[107] and 25 at

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[99] Guhl, E. & Koner, W. (1994) p. 520
[100] Sennett, R. (1994) pp. 193-4
[101] Wacher, J.S. (1995) p. 157 fig 69
[102] J.R.S. 49. (1959) p. 113; Walthew, C.V. (1975) p. 191
[103] Frere, S.S. (1959) pp. 10-2 fig 5; (1983) p. 267, fig. 98, 113
[104] Wheeler, R.E.M. (1936) pp. 93-6
[105] Bushe-Fox, J.P. (1916) pp. 4-20, pl xxxi & xxxii; Wacher, J.S. (1975) p. 369; (1995) p. 371; Walthew, C.V. (1975) pp. 191-2; Crickmore, J. (1984) pp. 66 & 81

Caerwent,[108] and building 123 in Culver Street, Colchester.[109] Several examples of courtyard houses can be seen in Silchester viii.1,[110] xiv.1, xxiii.2,[111] xxvii.1,[112] and xxxv.2.[113] While the *fauces* helped separate the house from the street, the design of the open shop front helped integrate the *taberna* with it.[114] The length of this passageway depended on the rooms that flanked it. Sometimes it was quite short but the *fauces* was always long enough to give the impression of a distinct architectural unit. The doorway and built in features were positioned to minimise contact between zones, along accepted cultural rules, and to reduce stressful impingement by restricting circulation between the house and the outside.[115] The doorway seemed to mark a division between the visual transgression of the household rather than a physical one. This space was the articulation of the initial penetrative event to the inner sanctum of the *domus*. The *fauces* not only manifested a journey between the outside world and inside but also an excursion from urban to domestic life. The entrance was a symbol of the owner's ambitions and was the focus of much artistic attention. Many who never actually entered the houses of the wealthy were well aware of their opulence and prosperity.[116]

The *taberna* doorway offered the sheer pleasure of immediate gratification as its panoramic aperture offered no resistance to the onlooker. It is only through the foundation of a remoteness or aloofness between the subject and object that a consciousness of value or desire is generated by the relationship. This valuation is a psychological occurrence that has a conceptual meaning independent of the natural world. It acquires meaning and significance through the conscious experience of judging values beyond their objective substance. The characteristic feature of value is its subjectivity. It is not attached to the object but is determined by the senses. The element of value or desire becomes an object as

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[106] Ashby, T., Hudd, A.E. & Martin, A.T. (1902) pp. 121-47, pl. viii; Ashby, T. (1907) pp. 451-64, pl. xlii; Walthew, C.V. (1987) p. 214
[107] Martin, A.T., Ashby, T. & Hudd, A.E. (1901) 301-10, pl. Xl; Walthew, C.V. (1987) p. 213
[108] Ashby, T., Hudd, A.E. & King, F. (1911) pp. 417-9; Walthew, C.V. (1987) p. 214
[109] Crummy, P. (1992) fig. 3.41
[110] Walthew, C.V. (1987) p. 207
[111] Boon, G.C. (1957) figs. 23-5; Walthew, C.V. (1975) p. 190, fig. 1
[112] Hope, W.H. (1902) p. 22, pl. Ii; Walthew, C.V. (1987) p. 220
[113] Walthew, C.V. (1987) p. 211
[114] Laurence, R. (1994) p. 100
[115] Sanders, D. (1990) p. 68
[116] Thébert, Y. (1987) p. 354

soon as it is opposed to the individual. The gratification of this desire is when the opposition between the object and the individual is effected consuming the value. Objects are not difficult to acquire because they are valuable; instead they gain value because they resist efforts to possess them. Differences in value originate from variations in this distance. Furthermore, if this object is to maintain any intrinsic value its value must not be so great that it transcends the individual's perception of what is realistically acceptable and hence loses any worth. In short an object only has value if the desire for the object is not immediately fulfilled and to some extent resists that desire.[117] In this way the doorway of the atrium, and possibly courtyard house, gained value and was based upon this type of exposure.

Even though most *taberna* fronts were exposed along their entire width access onto the actual shop floor was frequently regulated by the shop counter. These counters could be a substantial mass would have been a barrier, located immediately behind the doorway and took up much of the threshold. This placement would mean that the counter performed a similar, although perhaps a more curtailed role, as the *fauces* creating an artificial distance between the exterior zone and that of the shop. In the homes of the élite the main entrance was frequently emphasised by the construction of a porch, and those of the *tabernae* were fronted by a portico. This created an ambiguous zone that projected into the street that was not part of the house's interior. The door marked the truest dividing line between the exterior and interior.[118] Hence any identification of the *taberna* entrance with 'sordidness' and house doorway with 'nobility' should be taken with a measure of restraint.

Regardless of what kind of doorway was presented to the individual it performed the same function as an entrance. Only the individual themselves can decide whether to enter or not and their decision is based upon what they perceive to be socially acceptable thereby reinforcing what is a subjective barrier. This can be based on the different cognitive information concerning the opportunities in the environment or the individual may use different decision making criteria to evaluate the environmental opportunities. This perception is not neutral and is continually compared with what has been seen in other situations that have been previously met and assimilated. Doorways would be part of

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[117] Simmel, G. (1978) pp. 60-72; Miller, D. (1993) p. 70
[118] Thébert, Y. (1987) p. 353

people's daily visual experience and these impressions were most often intuitive and simultaneously blurred.[119] The entrance to the atrium house was seen as having more dignity and value then that of the *taberna* in that it resisted transgression by the multitude allowing the entry of a chosen few. Contemporaneously, as the doorway is open it offered a limited view of the internal setting and appears inviting; it maintained a value as it allowed the impression or even the promise that the desire to enter may be fulfilled. Curiosity was stimulated by views that offer a glimpse of an alluring interior.[120]

Both types of doors gained power, status and profit from their ability to control and exploit penetration from the outside. Clearly both performed the same function, as an entrance, but it was the manner in which this was carried out that caused offence. The *taberna* front lacked subtlety in that it openly exposed its innards to blatantly make a profit. Houses on the other hand did this discretely, as they merely hinted at the majesty and beauty that awaited the privileged. Its gaze held hidden experiences, knowledge and expectations. This gave the *domus* a serenity and order from the hustle and bustle of the street. Both types of doors performed the same task, but offered two varying degrees of social penetration.[121]

Summary

Although the evidence for *taberna* doorways is limited in Roman Britain enough survives to show that they followed the form known in Italy. The wooden doors or shutters that covered over the wide open doorway of *tabernae* have been lost but the examples of threshold grooves found all over Britain show that they existed. Whether their appearance was the same as those in Pompeii and how they were locked shut still remains somewhat of a mystery. As the Romano-British examples appear to have been comparable to those in Italy it can be presumed that they preformed the same function. Overall the *taberna* façade and particularly the doorway was an active selling tool, a promotional device to attract

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[119] von Meiss, P. (1990) p. 27
[120] Crowhurst-Lennard, S.H. & Lennard, H.L. (1993) p. 41
[121] Wallace-Hadrill, A. (1994) p. 118

people to shop.[122] A doorway could have a very personal effect on the user. It provided a visual and physical transition from the exterior sphere to the shop's interior. The threshold was the point at which the *taberna* began to stimulate a response from the shopper. With one motion, the customer was removed from the freedom of the public environment to the controlled commercial world of the *taberna.*[123] Once the shopper entered into the retail zone they had made a subconscious commitment. It may not have been an obligation to purchase something within the *taberna* but it may have been strong enough for them to look seriously at the merchandise. Wide and open entrances required no physical effort from customers to make the visual transition from the outside into the controlled environment of the *taberna.*[124] Hence the façade must have captured the customers attention and invited them to look at, and perhaps to buy the products or services for sale.[125]

[122] Barr, V. & Broudy, C.E. (1986) p. 1
[123] Barr, V. & Broudy, C.E. (1986) p. 20
[124] Green, W.R. (1991) p. 80
[125] Green, W.R. (1991) p. 20

Chapter IX

Covered Walkways

With such an expansive opening some form of shelter was required to protect the doorway, counter and merchandise when the *taberna* was open, and the actual door itself from weathering when closed.[1] As rain seldom falls perpendicularly, the stock and door would frequently be drenched by rain, damaged merchandise would become useless, and if sold, it would inevitably be at a loss. It would be difficult to maintain such a large door if it was constantly damp and any iron fittings would quickly rust. Shelter could be in the form of a simple pent roof supported by beams above the doorway or a more architecturally elaborate portico. The features that were generally restricted to shops were wide entrances from the street, with a characteristic threshold and lintel discussed above but also a covered walkway running along the street.[2] Throughout the empire *tabernae* can be found behind porticoes especially when they are located along main streets. Such an arrangement is normally only found in relation to shops but as *tabernae* were located on the ground floor of the developed *insulae* at Ostia, porticoes became the standardised façade of the Roman *insulae*.[3] In Ostia the inclusion or omission of arcades[4] usually depends on the nature of the street and the character of the buildings. They appear most frequently on the principal streets or on structures of some pretension.[5]

The earliest surviving Roman covered walkways are colonnades like those preserved at Cosa.[6] Later examples can be seen at Herculaneum such as that in front of the *Casa a Graticcio*.[7] These consist of a row of columns, supporting a simple lean-to or pent roof stretching from one wall to a colonnade or a second floor balcony that projected to

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[1] Merrifield, R. (1975) p. 50
[2] Bakker, J.T. (1994) p. 77
[3] Boëthius, A. (1953) p. 440; (1960) p. 165; McKay, A.G. (1975) p. 89; Bakker, J.T. (1994) p. 80
[4] The term arcade that is used here refers primarily to their function as a sheltered walkway over a group of *tabernae* in Italy, and secondly to their architectural feature, which was a row or arches, which probably never existed in Roman Britain.
[5] Packer, J.E. (1971) p. 41
[6] Packer, J.E. (1971) p. 31
[7] Maiuri, A (1959) p. 31 & pl. XI, fig. 20; McKay, A.G. (1975) figs. 28-29

form a sheltered passage. Porticoed *tabernae* of brickwork existed along the *via del Foro* at Pompeii.[8] In the evolved Ostian town plan of the second and third century it is the arcade and not the colonnade that is the dominant form.[9] However, even along the main thoroughfares, the *Decumanus Maximus* and *via dei Molini*, colonnades can be seen in front of the shops flanking the street.[10] A portico also marked out the street leading to the *Cardo Maximus*.[11] There were balconies and porticoes along the façades of the *insulae* of Rome as can be seen on the Severan marble plan.[12] Livy mentions that the *tabernae* of the *Forum Romanum* were already two storeyed and had a portico in front of them by the fourth century B.C.[13] According to Festus the Censor Maenius of 338 B.C. built *maeniana* (balconies) on top of the shops.[14] These were placed on the projecting beams that carried the second storey and rested on the columns in front of the shops.[15] There can be little doubt that they existed on other streets of Rome but those of the Forum were doubtlessly more ornate and artistically decorated.[16]

The other form of shelter, the corbelled roof, was more individualistic as it normally covered a single doorway. The beams that were used to carry the pent roof may have performed a dual function, as the braces for the lean-to roof and ceiling timbers.[17] The canopies that are so common above the doors at Pompeii are simple pent roofs whose lower support is given by one horizontal member resting on two putlogs socketed into the wall and acting as corbels, for example along the façades of the Black Salon at Herculaneum and the *via dell'Abbondanza* at Pompeii.[18] A slight variation of this theme where a roof is supported by three horizontal beams can be found in front of *tabernae* I.x.9 in the *insula del Menandro* [19] and the *Casa degli Amanti* I.x.11.[20] In Herculaneum some of these

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[8] Boëthius, A. (1934) p. 167
[9] Packer, J. (1971) p. 31
[10] Boëthius, A. (1953) p. 442; (1960) p. 158 fig. 84a; Meiggs, R. (1973) p. 130
[11] Calza, G. & Becatti, G. (1958) fig. 2
[12] Boëthius, A. (1934) p. 158
[13] xxvi.27
[14] 135; cf Isidorus 15,3,11; Cicero *Acad. Pr.* 2, 22, 70)
[15] Boëthius, A. (1934) pp. 165-6
[16] IX.40 mentions that they were decorated with shield in 307 B.C. and Tacitus in his *Annals* XV, 43 states that they were constructed in stone.
[17] Ling, R. (1997) p. 29, fn. 11
[18] Adam, J-P. (1994) p. 207, fig. 488
[19] Ling, R. (1997) p. 171

overhanging roofs were supported by carved wooden beams that can still do be seen.[21] Shelter could alternatively be provided by a projecting jetty for a balcony or to provide extra living space for an upper storey as in I.x.1 and I.x.18, in the *insula del Menandro*[22] or along the *via dell'Abbondanza*.[23] The apartment house on the Capitoline Hill had a façade that supported a narrow balcony carried on a series of travertine brackets that were subsequently altered to provide a two-story arcade.[24]

Give the constraints imposed by the Roman remains in Britain and the rest of north-western Europe it would be extremely difficult to detect a canopy as it needed no structural members other then a supportive wall. As walls, particularly those found in an urban setting, rarely survive to their full height the only way that a canopy may be inferred is similar to the method roofs are traced whereby their eaves-drip is frequently found parallel to the wall. As these canopies would normally be located in front of the *taberna* and cover or at least bordered a metalled street this form of detection would be difficult. Porticoes, on the other hand, need the extra structural support of pillars that in turn need some form of foundation that leave subterranean traces that can imply their existence and boundaries. This type of building pattern occurred in the towns of Gaul and Germania.[25] Colonnaded streets with *tabernae* can be found at Vaison-la-Romaine on the *rue Centrale,*[26] linking the north to south gates at Aquincum on the Danube in Pannonia,[27] on the corner of *insula* xxiii at Augst, Switzerland[28] and Avenches.[29] This form of street frontage was a typical feature of early Gallic architecture, with obvious Italian analogies.[30]

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[20] Ling, R. (1997) p. 298
[21] Deiss, J.J. (1976) pp. 126-7
[22] Ling, R. (1997) p. 214
[23] Adam, J-P. (1994) p. 124, fig. 285
[24] McKay, A.G. (1975) p. 88
[25] King, A. (1990) p. 85; Poulter, A. (1992) p. 117
[26] MacKendrick, P. (1971) p. 112 & fig 4.12; McKay, A.G. (1975) p. 162; Liversidge, J. (1976) pp. 51-3 & figs. 15-16
[27] Liversidge, J. (1976) p. 58
[28] Liversidge, J. (1976) p. 47
[29] Wightman, E.M. (1985) p. 88
[30] Ward-Perkins, J. B. (1981) p. 239

i) The Covered Walkways of Roman Britain

The forum of Wroxeter, destroyed in a fire of A.D.160-75, presents the best evidence for a probable reconstruction of porticoes in Roman Britain (Figures 67 & 68).[31] Although the portico was part of a public building it was located on the exterior of the forum and fronted single *tabernae* that may have been run by independent retailers. At Wroxeter the eastern portico consisted of a colonnade some 6m wide that ran the whole length of the forum. The portico's stylobate consisted of a single row of large blocks of stone. Within the excavated area above the stylobate all the column drums, except one, remained *in situ*. Given the spacing between the excavated pillar bases and the length of the portico there were probably 22 columns in total. Due to the limited structural remains the height of portico is unknown. However, based on classical proportions the diameter of the drums has been taken to suggest that the pillars were approximately 3.18m tall. A wooden architrave is implied by the conspicuous absence of any elements for a stone entablature and the large quantities of nails and iron straps found in the débris of the second destruction. A wooden entablature would have been easier for the small columns to carry as well as being cheaper to build. The roof was covered in tiles the débris of which was found on the ground. A pentice roof sloping down from the front wall of the range of rooms to the row of columns is postulated by the existence of a gutter bordering the street that would have carried precipitation away from the roof and any surplus water on the ground.[32]

A number of grooves were found cut through the mouldings of some of the column bases in a line parallel with the stylobate. These were presumably mortises cut subsequent to the initial construction of the portico for the insertion of some form of wooden upright. The grooves were located between two pairs of adjacent intercolumniations, column bases 2 to 4 and 5 to 7, with the interval between them left exposed. Their purpose is unclear but it is known that porticos were used to sell merchandise and these apertures may have supported some form of stall. Alternately the grooves may have been used to fix railings or a balustrade between the columns such as those thought to have existed between the

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[31] Webster, G. & Stanley, B. (1964) p. 117
[32] Atkinson, D. (1942) pp. 59-61

columns surrounding the temple of Apollo in Pompeii. If this were the case a more continuous arrangement along the entire colonnade would perhaps be expected.[33]

To the south of the forum, along the main north-south road, long narrow buildings with open fronts that have been identified as *tabernae* were uncovered in *insula* viii (Figure 32). These *tabernae* were constructed in the early second century and were destroyed in the same fire that devastated the forum. Although the *tabernae* developed independently of each other there is the suggestion of a unified approach to the appearance of their façades with the construction of a colonnade.[34] In front of Site 1 there was a gravel path about 2.5m wide and this formed a continuous walkway parallel to the street. In the forepart of Site I stones mortised to receive wooden uprights were uncovered and these indicate a wooden portico or veranda in front of the shop. Similar features were also found in the anterior of Site IV.

In front of Site III the remains of nine stylobates were found. A moulded column base was found *in situ* and four similar ones near by within the *tabernae*. Surrounding these were a large number of roofing-tiles and burnt wood indicating that the pent roof consisted of tiles. Large blocks of stone bordering the street in front of Site III were cut to receive timber uprights and crosspieces indicating that there may have been a wooden trelliswork separating the pavement from the street in a later period.[35] Site V was unique and differed from the other dwellings in that it appears to be a temple placed between the rows of shops. The entrance to the temple was from the main street through a portico of six columns.[36] Bordering the street and fronting the stone supports for the row of columns in front of sites V and VI there was a well-made open drain or gutter. During the later period dwarf walls were set between the columns in front of rooms 3 and 6/7 of Site VI.[37]

All the buildings along the eastern side of *insula* viii appear to have had a veranda in front of them composed of either wood or stone that formed a well-defined boundary with the street. How uninterrupted the covered walkway was is unclear as the various methods of support for the upper parts of the portico as well as the contrasting distances of

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[33] Atkinson, D. (1942) pp. 63-4
[34] Wacher, J.S. (1975) pp. 359 & 369; (1995) pp. 363 & 371
[35] Bushe-Fox, J.P. (1913) pp. 11-2
[36] Bushe-Fox, J.P. (1914) p. 8
[37] Bushe-Fox, J.P. (1916) pp. 1-13

the dwellings from the street frontage indicate. However, the props in the middle of the walkway may indicate that the portico was self-sustaining and independent of the buildings behind. If the portico were built of stone it would have made an interesting contrast to the wattle-and-daub buildings beyond. The column bases discovered on Site III had similar features to those excavated in the forum.[38] This would have meant that the façade of the *insula* would complement the architectural details of the forum to the north. Overall the evidence points to the street being bordered by square blocks that were intended to support vertical posts of a veranda. Whether it was constructed in timber or stone the portico was of rough construction and it must have had an imposing appearance from the street in keeping with the location of the *tabernae* on the principal thoroughfare of the city.[39]

The colonnade at Verulamium is perhaps one of the most interesting features of the shop planning at *insula* xiv. During the excavation of period 1 (Figure 2) a sleeper-trench was found bordering the street metalling. This sleeper-trench was uncovered in four locations and presumably formed the foundation for a continuous colonnade about 3.35m wide fronting the *tabernae* and bordering the street. This possibly turned the corner with the street as no street metalling was found immediately outside the south-eastern wall of the *tabernae*. The upper elements of the covered walkway may have been formed by a number of evenly spaced posts. Due to the absence of post-holes and the presence of a sleeper-beam Frere has taken this to imply that the colonnade had a wooden balustrade. However, the absence of post-holes in this form of construction should not be seen as surprising. A sleeper beam may have solely supported the vertical posts and does not indicate a balustrade. Furthermore, a sequence of singly spaced posts would have been more economical. The presence of sizeable chunks of burnt daub may indicate that there was a solid balustrade wall during period IID (150-55 A.D.). A corresponding portico on the opposite side of the street fronting what may have been similar buildings was also uncovered. This would imply that Watling Street was flanked by two parallel covered walkways with or without some form of balustrade.[40] The absence of tiles at Verulamium suggests that a simple thatched or shingle roof covered the portico. The portico was

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[38] Atkinson, D. (1942) p. 61 fn. 1
[39] Bushe-Fox, J.P. (1913) pp. 7-18; White, R. & Barker, P. (1998)p. 81
[40] Frere, S.S. (1959) pp. 3-8; Wacher, J.S. (1975) p. 204; (1995) p. 221

obviously an important architectural feature as its existence continued through the history of the *insula*.[41] This same occurrence was noted in the colonnade along the side of *insula* viii at Wroxeter.[42]

Colchester also provided some interesting examples of covered pedestrian walkways. They occur along many of the streets such as Balkerne Lane, Ermin Street, North Hill, Lion Walk, Middleborough and *insulae* 6, 28, 36 and 37 (Figures 16-18).[43] From the excavated buildings at Culver Street along the crossroads of *insulae* 26, 27, 34 and 35 it can be seen that porticoes flanked the streets.[44] These were usually 3m wide and had a floor surface of compacted gravel. The walkways were then separated from the street by a continuous foundation. The foundation of the veranda in front of Building 70, Middleborough was of mortar and *septaria* and this probably supported a wall or colonnade.[45] Similar stone-and-mortar foundations were also found in front of Buildings 111[46] and 123.[47]

At Cirencester, *insula* v, there was a portico in front of *taberna* 5 and this continued around the corner to flank Ermin Street. This meant that the colonnade of *insula* v paralleled those of *insulae* ii and vi and complemented that of the forum basilica (Figure 9).[48] London provides several examples of covered walkways. At Courage Brewery and Park Street, fronting the western edge of road 2 in area 1, a large partially excavated timber-framed building was found. Four rooms were uncovered and there was a parallel foundation for a portico or walkway.[49] Another partly excavated building at 1 Poultry, *insula* v, had main load bearing walls that were set back from the roadside suggesting the presence of a portico.[50] A row of *tabernae* on Fenchurch Street, along the main east-west roadway to the forum, seems to have been erected in a similar fashion to the early periods of *insula* xiv at Verulamium. The substantial block was 28.6m wide and opened onto a

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[41] Frere, S.S. (1972) pp. 14-5, 41, 77
[42] Bushe-Fox, J.P. (1913) pp. 11-8
[43] Wacher, J.S. (1962) p. 9
[44] Crummy, P. (1992) p. 32 fig. 3.7
[45] Crummy, P. (1984) p. 166; (1992) p. 135; Wacher, J.S. (1989) p. 111 fig. 17
[46] Crummy, P. (1992) pp. 75-6
[47] Crummy, P. (1992) p. 105
[48] Wacher, J.S. (1962) p. 9; Holbrook, N. (1998) pp. 192, 196, 204-7
[49] Dollon, J., Jackson, S. & Jones, H. (1991) p. 258
[50] Burch, M., Lees, D., Hill, J., Rowsome, P., Jones., S. & Treveil, P. (1997) p. 135

continuous portico nearly 59m long and 3.35m wide.[51] There is evidence for a stone or more likely a wooden façade along the central area of Kenchester. The strip-buildings flanking the east-west road were partially flanked by a stone façade located on Sites 1, 2 and 9, but elsewhere the street appears to be bordered by timber posts set into mortised stones that formed a veranda similar to that noted in Wroxeter *insula* viii.[52] Comparable mortised stones were also found in front of the strip-buildings during the earlier 1912-13 excavations.[53] In general, it would seem that some form of communal shelter was a feature of *tabernae* façades in the major settlements of Roman Britain, a feature it shared with the rest of the empire.

Caerwent, on the other hand, presents a more individualist approach to *taberna* fronts. There seems to have been no effort to construct continuous sheltered walkways along the edges of the *insulae* but merely to build a shelter in front of the individual *taberna.* In House XVs the whole front of the three amalgamated strip-buildings was occupied by a veranda (Figure 35). The bases of the columns or posts survive. There were seven in total and were placed 3m apart and measured 0.6 to 7.5m square. The portico was approached from the street by a flight of sandstone steps that indicated considerable signs of wear. The veranda had been common to the three early buildings and in the course of alterations this was done away with and a new portico was constructed that encroached onto the street. While the veranda was common to the neighbouring buildings they were not linked together.[54] The middle and eastern *tabernae* of period two House XVIs had solid sheltered walkways placed in front of them that were entered through the front and sides. The central building had a double opening on the façade that was divided by a pillar in the centre and this gave a width of 1.5m on the west and 2.1m on the east. On the western approach there was a flight of three well-worn steps of yellow sandstone 2.7m wide to make up for the gradient of the street. The entrance on the eastern side was at ground level and had a width of 2.55m. The façade of the eastern building was unusual as

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[51] Marsden, P. (1980) pp. 22-3; (1987) pp. 3 & 71; Merrifield, R. (1983) p. 48

[52] Jack, G.H. & Hayter, A.G.K. (1926) pp. 21-7; Wilmott, A.R. (1980) p. 126; Burnham, B.C. & Wacher, J.C. (1990) pp. 74-5

[53] Jack, G.H. (1916) p. 24

[54] Ashby, T., Hudd, A.E. & King, F. (1911) p. 421

it was divided into two separate blocks that were entered from the front and sides.[55] In front of House XVIIIs there was two bases that possibly carried columns or posts for an individual veranda.[56] During the early period of XVIIIn bases in front of the building could have carried a porch or awning (Figure 33).[57] In all the examples from Caerwent there was sufficient space for pedestrians to pass between the columns and the shop front. At Caerleon, Bear House Field, of the six buildings excavated in 1954 in the civilian area, the shop-frontages of two of the buildings were in the form of porticoes.[58] Where this individual arrangements has not been utilised some form of canopy may have been built over the doorway on corbels as in Pompeii and Herculaneum, especially when the front of the building does not continue right up to the very limit of its plot. What does seem apparent from the limited evidence is that there is a contrast between the size of the settlement and the type of covered walkways adopted, with the larger towns opting for continuous porticoes linking *taberna* and the smaller agglomerations choosing a more individualistic approach.

ii) Function

The result of the disaster in the Wroxeter forum allows a probable reconstruction of the activities within the covered walkways that fronted the *tabernae* of Roman Britain. During one market day a fire started amongst the shops, overwhelming the stalls that had been set up in the Eastern Portico. The suddenness of the destruction is evident from the fact that valuable goods and articles were left behind. The fire offers one of the most important glimpses of the use of porticoes in Roman Britain.[59]

One dealer lost more than 200 decorated and plain *terra sigillata* vessels imported from the Central Gaulish potteries of Lezoux and the East Gaulish centre at Rheinzabern. These lay in front of the most northern example of the grooves cut into the column bases

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[55] Ashby, T., Hudd, A.E. & King, F. (1911) p. 429
[56] Ashby, T., Hudd, A.E. & King, F. (1911) p. 435
[57] Ashby, T., Hudd, A.E. & King, F. (1910) p. 8
[58] *J.R.S.* 45. (1955) p. 122
[59] Branigan, K. (1980) p. 92

mentioned above. The *terra sigillata* were grouped together in sets of mostly four or five, as if they had been tied and stacked on shelves or benches, from which they had slid gently into the gutter. This would seem to give weight to the argument that these mortises served to support some form of stall such as those found on funerary reliefs. Nothing was found in the gutter in front of the southern group of grooves but these could have held the supports for a stall of perishable goods or were not in use at the time.[60]

Amongst the nests of *terra sigillata* there was about a hundred Kentish whetstones possibly belonging to an ironmonger or as a sideline for the merchant selling the *terra sigillata*.[61] The manner in which they lay suggests that they had originally been packed into a box of which no trace remains. The number present and the way in that they fell, makes it apparent that the box was nearly full.

At the southern end of the portico, between pillar bases 9 and 10, a crateful of *mortaria,* seventeen of which bear the name of Sennius of Mancetter-Hartshill, were also recovered.[62] Some were in an upright position, while others were bottom up, which would be consistent with the suggestion that they had fallen into that position from a stall placed between the columns of the portico. They had also been covered by tiles and other building débris. There were no grooves behind the *mortaria* discovery but as these were comparatively large vessels they may have been stacked on the ground rather then on counters.[63] All the evidence would seem to demonstrate that these products had been sheltered by the covered walkway.[64]

Further evidence, although less significant, for activities under these covered walkways can also be seen at Verulamium *insula* xiv. A deposit of South Gaulish *terra sigillata* was found in the portico outside room 14, period 1 (43-60 A.D.). The group included a relatively large number of vessels and it may have represented breakage from the shop or a stall beside the street.[65] In period IIB (105-30 A.D.) a base consisting of flints

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[60] Atkinson, D. (1942) p. 64
[61] Wacher, J.S (1995) p. 367
[62] White, R. & Barker, P. (1998) pp. 64 & 87
[63] Atkinson, D. (1942) pp.127-8; Hartley, B.R. (1972) pp. 27-9; Wacher, J.S (1995) p. 367; Rhodes, M. (1989) p. 54
[64] White, R. & Barker, P. (1998) p. 89
[65] Frere, S.S. (1972) pp. 20, 218, S2 & S4, 218-222, D1-D8; Millett, M.J. (1987) p. 104; Rhodes, M. (1989) p. 54

and broken tile was found in front of room 7. Beside this, three post-holes, 0.076m to 0.1m in diameter and 0.3m deep, were uncovered and these were formed in a right angle. Their function is unknown, and may either have been for a wall continuing the boundary line of rooms 7/8 in period IID (150-55 A.D.) or a drain as in period IIC (130-150 A.D.). As the floor surface in this area is uniform the use of a wall seems unlikely. Given their form and location in the portico it is at least possible that the posts supported a counter of some sort.[66] In the final phase of period II, both the north-west wall of room 14 and the south-east wall of room 18 project into the portico. It is not clear why this occurs, unless they were wing walls to give shelter to projecting counters that fronted the shops.[67] Similar occurrences were noted in front of Sites II and IV of *insula* viii at Wroxeter.[68] It is possible that these later frontages, likes those in Verulamium, may have been some sort of stall or booths. The floor surface in front of room 35 (period IIC) had been floored in chalk in which were some foundation trenches and post-holes. The deepest post-hole was about 15mm deep while the others were only 5 to 8mm deep. These possibly supported benches or counters blocking the portico.[69] More post-holes appear in front of Rooms 35 and 42. They were driven deeply into the ground and their regular plan suggests a well-built counter.[70] If stalls or counters were located under the sheltered walkway they were placed against the shop front itself and must have faced outwards into the street. Perhaps these stalls were similar to those depicted on the upper portion of the *Pilier du Cultivateur*, in the Musée Luxembourgeois, Arlon[71] or on the relief of a vegetable vendor in the Museo Ostiense, Ostia (Figure 62).[72] It was not uncommon for temporary stalls to be erected in the populated areas of towns and Della Corte found examples of booths in the area of the Pompeian amphitheatre.[73] More permanent and substantial stalls existed between the porticoes of the Djemila and Lepcis Magna markets. In this case, the column opening to

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[66] Frere, S.S. (1972) p. 42; Liversidge, J. (1968) p. 69
[67] Frere, S.S. (1972) p. 77
[68] Bushe-Fox, J.P. (1913) pp. 8 & 18
[69] Frere, S.S. (1972) p. 56
[70] Frere, S.S. (1959) p. 6; (1972) p. 74
[71] Kampen, N. (1981) Fig. 30; Matthews, J. (1993) p. 249
[72] Kampen, N. (1981) Fig. 40
[73] Della Corte, M. (1965) p. 106; Frayn, J.M. (1993) p. 5; Inscriptions *C.I.L.* iv.1096, 1096a, 1097, 1097a and 1115 indicated the positions that the stalls occupied. According to *C.I.L.* iv. 1096 they did *'permissu aedilium'* with the permission of the aedile.

each market shop, kiosk or booth was barred by a stone table or stall, so that access could only be obtained by going over or under the counter (Figure 55).[74]

Although it is not possible to determine the exact activities that took place under the porticoes it is apparent that they were well used by both the proprietor and customers. The heavy pedestrian traffic in Verulamium *insula* xiv meant that there were abrupt changes in the floor surfaces of the portico, an occurrence also noted in the shop floors, which were renewed and this led to differences in levels between adjacent areas.[75] The large number of surfaces in the east portico of the Wroxeter forum also suggests a great amount of pedestrian traffic.[76] The surfaces of the sheltered walkways at Colchester are best illustrated by that next to building 20 at Lion Walk. There was a succession of thin surfaces of very weathered small gravel with patches of abraded pottery and tile all lying horizontally. The pattern of erosion is consistent with considerable foot traffic rather then exposure to the elements. Only the surfaces closest to the building survive, being the area least exposed to pedestrian traffic.[77] In Caerwent the more substantial remains of sandstone steps in front of House XVs show considerable signs of wear.[78] The western approach to the middle *tabernae* of period two House XVIs was also well worn.[79]

iii) Portico Use

The most obvious use of the covered walkway was to provide protection from the filth of the streets and the vagaries of the weather. It also offered protection to the displays below.[80] In Northern Italy colonnades afforded shelter from heavy showers, and shade from the hot sun in the South.[81] Shade would not have been a serious concern in Britain, although the portico could have acted as a visor for the lower sun during sunrise and sunset.

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[74] Wheeler, M. (1966) pp. 66-8, 136; Manton, E.L. (1988) pp. 67 & 96 & figs. 20 & 45; Raven, S. (1993) p. 106

[75] Frere, S.S. (1959) p. 6; (1972) pp. 15 & 74; Liversidge, J. (1968) p.68

[76] Atkinson, D. (1942) p. 64

[77] Crummy, P. (1984) pp. 28 & 62

[78] Ashby, T., Hudd, A.E. & King, F. (1911) p. 421

[79] Ashby, T., Hudd, A.E. & King, F. (1911) p. 429

[80] Addy, A.O. (1905) p. 102; Barr, V. & Broudy, C.E. (1986) p. 19

Shelter was an obvious requirement for customers, but it also had a psychological impact, as individuals under a canopy would feel safe, and this could have the effect of encouraging them to shop. This same security would be felt by those working within the *taberna*, as the portico would divert water away from the work floor into the street, while at the same time letting air circulate into the building.

Shoppers would usually only see the *taberna* front and interior as they walked along the street only a few feet away from the façade. This gives the passer-by an oblique view of the *taberna* that may only last a few seconds. Thus the retailer must attract the attention of potential customers at their first glance. Most of the shopkeepers have built their shop fronts right up to the line of their property in order to make use of every available piece of land as frontage space which may have been at a premium and expensive. The only contrast between neighbouring properties was limited to differences in materials and in the amount of front transparency. The *taberna* façade essentially became two-dimensional. Thus, to increase the three-dimensional element of the storefront and to offer greater design variety the concept of projecting shop fronts was developed.[82] Basically this enabled the merchant to emerge from the confines of the *taberna* and to expose more stock and carry out trade on the street side.[83] In view of the small size of the rooms at the Wroxeter forum and the *tabernae* at *insula* xiv in Verulamium the colonnade would have provided additional covered space for stalls and thus created more space in the shop floor.[84] A successful retail store must thrust out into the street, so that customers could see what the retailer wished them to see, with the best light, colour, background and ambience.[85]

Colonnades were primarily for the organisation of vehicle and pedestrian traffic routes around and leading to buildings. Porticoes created an artificial environment that enabled people to escape whatever the elements threw at them. In fact they were a continuation of the artificial environment of the building into the street. They linked what may be distinct and separate buildings under a common environment without having to force the individual through a radical change of environment when exiting from one shop

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[81] Frayn, J.M. (1993) p. 101
[82] Green, W.R. (1991) p. 73
[83] Loane, H.J. (1938) p. 62
[84] Atkinson, D. (1942) p. 85
[85] Barr, V. & Broudy, C.E. (1986) p. 5

and entering another *taberna*. Any passage from the inside to outside, and *vice versa*, involves drastic changes of environmental conditions. There is the total forfeiture of one set of familiar qualities and the dramatic and sudden assimilation of a new unaccustomed one. The contemporaneous presence of both zones under the portico enables those undergoing passage the time for the complementary processes of both withdrawal and familiarisation to evolve side by side.[86] The intermediary stage of the portico made the transition easier and perhaps more solemn.[87] While a sense of belonging to a building is elicited by stepping into the covered walkway, that was itself adhered to the *taberna*, this attachment remained vicarious as the person does not belong in a territorial sense to the covered walkway.[88] Covered arcades were developed to utilise the space between major shopping streets and these may have been the forerunners of the great planned 'shopping precinct' of Trajan's Market in Rome. Trajan's Market seems to have incorporated two types of market, the large public retail bazaar and porticoed exchange buildings.[89]

As the sheltered walkway was an internal street and the continuation of the *taberna*, the interior of the *taberna* became the most important feature.[90] Having attracted the visitor or potential customer into the portico the owner must then devise ways and means of encouraging them to stay by providing exciting displays and the right type of goods. The majority of the surviving counters in Pompeii, Herculaneum and Ostia were located just inside the shop entrance.[91] Most porticoes were narrow but some accommodated seats. Under the balcony of the *thermopolium* on the *via di Diana*, in Ostia, and just outside the entrance are two small seats facing each other for customers to sit outside.[92] There were at least two instances in which the Byzantine shops W1 and W2 of Sardis encroached into the colonnade by building seating facilities for their customers. A Corinthian capital was placed into the portico in front of shop WI and located in front of the window. It was thought that this might have served as a seat or possibly as a sales desk. In the case of W2, which has been interpreted as a restaurant, this consisted of a substantial L-shaped brick

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[86] Plummer, H. (1993) p. 369
[87] von Meiss, P. (1990) p. 121
[88] Plummer, H. (1993) p. 375
[89] Frayn, J.M. (1993) pp. 16-7
[90] MacKeith, M. (1985) p. 143
[91] Adams, W.H.D. (1872) p. 59
[92] Calza, G. & Becatti, G. (1958) p. 28; Hermansen, G. (1982) p. 130; Adam, J-P. (1994) p. 321 fig. 732

construction in front of the building that effectively blocked off half the width of the colonnade.[93] In sitting for a few moments, attention may be drawn to goods not previously seen and this may encourage the customer to visit the portico and possibly the *taberna* again.[94] The character of the façade could exert a strong influence over the atmosphere of the public domain, making people feel either welcome or not.[95]

Urine was also collected outside shop doors or porticoes in a pot in which passers-by were invited to use. Their most frequent location was on street corners where it was hoped they would attract the most potential users, as in Pompeii.[96] They were also located in passageways or near the entrance to shops.[97] Presumably these were much needed as householders in Pompeii frequently put up notices on the wall warning people with the words *'Cacator cave malam'* so as not to use the street as a toilet.[98] Not only were the streets used but also doorways, statues[99] and even the tombs of the dead were used as lavatories.[100] At the corner of the street beside IX.xiii.6 was an amphora without a neck. The lower half of an amphora hung against the wall was found on the corner of a lane that ran beside the House of Julius Polybius.[101] Their use in Rome is mentioned by Macrobius.[102] These public urinals were large jars, cut short for convenience and were often called *dolia curta.*[103] They were regularly emptied and their contents sold to the fullers who used it to cleanse wool, stiffen cloth and mordanting certain dyestuffs.[104]

Evidently they produced a good deal of money, and the scale of the enterprise is apparent from the tax which the emperor Vespasian (A.D. 69-79) introduced on this most lowly of commodities. In retribution for this pecuniary measure these public urinals were

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93 Hanfmann, G.M.A. (1959) pp. 17-8; Crawford, J.S. (1990) p. 7 figs. 126, 128, 129, 130 & 132
94 MacKeith, M. (1985) p. 146
95 Crowhurst-Lennard, S.H. & Lennard, H.L. (1993) p. 40
96 Jackson, R. (1988) p. 52
97 Meiggs, R. (1973) p. 143
98 Alcock, J.P. (1996) p. 101
99 Juv. Sat. 1.131
100 Petronius Sat. 71.8
101 Brion, M. (1960) p. 129
102 Sat. 3.16.15
103 Lucretius 4.1026-9
104 Brion, M. (1960) p. 129; Callender, M.H. (1965) p. 30; Scobie, A. (1986) p. 414; Robinson, O.I. (1992) p. 121

nicknamed '*Vespasiani*'.[105] Two amphorae were uncovered in front of Building O in Well Court, London. These may have functioned as urinals but as they were deliberately set into the ground and were placed inside the front wall of the *taberna* they could not have been used as such.[106] A similar occurrence was found inside several of the entrances to the Regis House warehouses and these have been interpreted as urinals by the excavators.[107] This for practical reasons would seem unlikely. The whole system even by Roman standards was not hygienic, as the terracotta jars were unglazed and porous. Sometimes cracked jars burst spilling their contents into the street. These were frequently reused and Martial mentions how much they stank especially those that were located beside the street.[108] Meiggs mentions that *dolia* were placed near to the entrance of *tabernae* in Ostia but he does not say that they were found within.[109] It is interesting that the front rooms of house 3, *insula* xxviii, at Verulamium were composed not only of two shops in rooms 1 and 6 but also two public latrines in rooms 4 and 7. Room 7 is thought to have had enough space for a two-seater toilet while Room 4 was much larger. It is difficult to explain why someone would add such a convenience to their house without some motivation for profit.[110] Public latrines that were independent of the baths were found in the busier regions of Italian towns. With a small entry charge they could be a profitable enterprise.[111]

The literary sources mention that among the crowds and counters of the colonnades itinerant peddlers could be found and they often encroached upon the preserve of the proprietor.[112] The hawkers followed the throngs of people and drew attention to their wares by their own distinctive cries. Naturally these were items that could easily be carried such as articles of clothing, shoes, matches, sausages and pastries.[113] The poor could also be found in the colonnades, as they had nowhere else to go. In the later Roman empire Gregory of Nyssa wrote '...The hand reached out to beg can be seen everywhere. The open

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[105] Suetonius, Vespasian 23; Dio Cassius LXV.14; Connelly, P. (1979) p. 60; Jackson, R. (1988) p. 53; Corcopio, J. (1991) p. 54

[106] Perring, D., Roskam, S. & Allen, P. (1991) pp. 56, 99, 101-2

[107] Greenwood, P. & Maloney, C. (1996) p. 5

[108] Mart VI.xciii.1-2.

[109] Meiggs, R. (1973) p. 143

[110] Frere, S.S. (1958) pp. 9-11; (1959) p. 12; (1981) p. 386; (1983) pp. 246-7; Alcock, J. (1996) pp. 99-101

[111] Juv. III.38; Jackson, R. (1988) p. 50

[112] Firebaugh, W.C. (1923) pp. 223-4

[113] Sen. Ep. LVI.ii; Mart. I.xli.3-10; Juv. VII.220-1; Dig. 14.3.5.4;

air is their dwelling, their lodgings are the porticoes and street corners'.[114] Idlers were attracted to the shadows of the porticoes as they could pass the day over a game of dice and a single drink at the sidewalk table of a restaurant, or just simply to gossip.[115] The street served as their living room and as an extension to the business premises of the restaurant owner. The porticos sheltered all beneath it as a place of leisure for some and work for others.[116]

The development of this fluid economic street space encouraged a change in street time. People went into the streets to shop before and after their own labours. The bakery started business at dawn and the butchers shop stayed open late at night after the meat had been purchased, prepared and roasted during the day.[117] *Popinae* stayed open until the small hours to serve nocturnal wanderers.[118] Essentially, the counter stayed open as long as there were people in the street. The street life that developed through the aggressive assertion of the rights of the various retailers, whose fluid surfaces encouraged economic competition, were also famously violent.[119]

At night the streets became pitch dark and anyone who wished to avoid the risk of a broken leg, or an unwelcome encounter, did not venture out unaccompanied without a torch. The occasional passer-by could stumble over the poor unfortunate who was using the colonnade as a place to sleep, or collide with drunkards staggering around.[120] From the dark alleys came invitations to debauchery, shady characters were to be met at every step and gangs roamed around looking for a fight.[121] No one ventured out without apprehension and a certain reluctance.[122] Generally those who had no reason for going out stayed at home if they were sensible.[123]

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[114] MacMullen, R. (1974) p. 87; Crawford, J.S. (1990) p. 7 quoting Gregory of Nyssa, De pauper. Amand. I, P.G. 46.457
[115] Carcopino, J. (1941) p. 250
[116] MacMullen, R. (1974)p. 64
[117] Mart. XII.lvii.5; CCXXII.
[118] Juv. VIII.158
[119] Sennett, R. (1994) p. 195
[120] Juv. V.8
[121] Catullus, LVIII,.4-5; Propertius, IV.7.19-20; Juv. III.278-80; Mart. VI.lxvi.1-2
[122] Carcopino, J. (1991) p. 60
[123] Paoli, V.E. (1975) pp. 13, 37-8

A colonnade defined explicit space although the amount of openness is greater than that of solid wall. Colonnades are essentially a perforated wall.[124] As an architectural invention the portico is ambiguous as it created a transitional zone that was neither public space nor a decisively private one. It occupied both interior and exterior zones without the exclusive predominance of either. The resultant interplay of zones contained a synthetic quality unlike either side, although it was composed of their elements, for here antithetical values can be simultaneously experienced. It was not a simple boundary to be transgressed as it formed an interspace lying between the inner and outer faces of the split boundary.[125]

The continuous veranda allowed easy communication between buildings as well as providing a certain amount of privacy. Even the individual porches, found in Pompeii and in Britain, created an ambiguous space that projected into the street that was not part of the house's interior.[126] The space between the street and the front door of the building created an external transitional space.[127] Only in such a zone, when an interface is expanded into an interspace, can an individual lead an ambivalent existence by being associated concurrently with two thoroughly distinct worlds and at the same time have an ongoing dialogue between them. During the hours of business the retailers advanced forwards and took over this zone, but even then it was never entirely their own, only to retreat again at night behind the safety of their shutters. The reason for this ambiguous transitional space is the importance that individuals place on the eternal and durable aspects of the architectural boundary, despite the retailer's changing requirements in selling space. Hence, this flowing and moving boundary does not lie easily with an individual's psychological necessity for a 'residential place' an area where they belong and feel safe.[128]

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[124] von Meiss, P. (1990) p. 102
[125] Plummer, H. (1993) p. 368
[126] Thébert, Y. (1987) p. 353
[127] von Meiss, P. (1990) p. 150
[128] van de Ven, C.(1980) p. 18

iv) Ownership/Control of Covered Walkways

Pertinent to this discussion is the whole question of ownership and who controlled and managed these porticoes. Once a city or town had been established there must have been some measure of supervision over its initial and subsequent development. Of great importance to this was the clear demarcation between public and private property and the area of the portico, given its ambiguous spatial context, must have been a constant source of conflict of interests. According to Gaius, who is supplemented by the Digest, public roads were one of the many items such as harbours, temples, tombs and so forth that were not subject to private ownership.[129] However, all the *tabernae* used their shop-frontages to exhibit their merchandise to their best advantage and to sell their goods. The natural consequence of this was that most of the retailing activities took place within the street proper that became conceptualised as part of the *taberna.*[130]

The dated examples of walkways in Colchester, in front of Buildings 20, 54-7, 64-5 and 70 suggest that, unlike Verulamium, they were not part of the original layout of the *insulae* and had been a later addition onto the street façade. When they were inserted the walkways were constructed onto the public thoroughfare as the position of the buildings fronting the street remained as they were. As the property boundaries had already been set, distributed and built upon it is difficult to see where else a walkway could have been placed without causing complicated legal difficulties over land ownership. Presumably this was public land but the activities of some later structures do bring this belief into question.[131]

At Lion Walk, Building 23[132] and Balkerne Lane, Buildings 54-8, structures were built onto the covered walkway.[133] Portico invasions can be seen in Verulamium and Wroxeter. During periods IIB-D at Verulamium structures that may have been counters were constructed in the portico.[134] In the final phase of period II, both the north-west wall of room 14 and the south-east wall of room 18 projected into the portico although it is not

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[129] Gai. Inst. II.2-11; Dig. 1.8; Crook, J.A. (1967) p. 140
[130] Al-Hathloul, S.A. (1970) p. 514
[131] Crummy, P. (1984) p. 28
[132] Crummy, P. (1984) p 127
[133] Crummy, P. (1984) p. 68
[134] Frere, S.S. (1959) p. 6; (1972) pp. 42, 56, 74; Liversidge, J. (1968) p. 69

clear why this occurs.[135] Similar occurrences were noted in the *tabernae* of *insula* viii at Wroxeter. In a later period a rough stone wall was built in front of site II and IV along the border of the street.[136] It is possible that these later frontages, like those in Verulamium, may have been some form of booths or stalls.[137] The three later amalgamated strip-buildings that formed House XVs at Caerwent had a common veranda that during the course of alterations for a new portico was constructed encroaching onto the street.[138] The middle and eastern *tabernae* of period two House XVIs had individual covered walkways that infringed considerably upon the street.[139] Britain was not alone with this custom in the north-west as the portico on the *rue Centrale* at Vaison, France, was later incorporated into the *tabernae* it fronted by an extension of their sidewalls across it.[140] In North Afica in Volubilus at the House of the Train of Venus and in Cuicul at the House of Europa extensions were placed in front of the dwellings impeding public circulation.[141]

In the early Roman period the conflict between public right of way and the private appropriation of public footpaths had been the subject of legal action and even literary comment. The *lex Julia municipalis*[142] of 44 B.C. forbids the building on, obstruction of, or ownership of public areas and porticoes in Rome.[143] Another, of the same date but for Urso southern Spain, is the *lex coloniae Genetivae Iuliae s. Ursonensis*.[144] This refers to respecting public roads or walkways within the area of the *colonia* and that all thoroughfares were public property.[145] As regards *tabernae* in the Digest 'they [the overseers] must see that nothing is left outside the workshop, except for fullers leaving out clothing to dry or a carpenter putting out wheels, and these are not by doing so to prevent vehicles from passing'.[146] The drying of clothing and felt outside the fuller's workshop and felt workshop was frequently through necessary due to the lack of floor space inside and

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[135] Frere, S.S. (1972) p. 77
[136] Bushe-Fox, J.P. (1913) p. 8
[137] Bushe-Fox, J.P. (1913) p. 18
[138] Ashby, T., Hudd, A.E. & King, F. (1911) p. 421
[139] Ashby, T., Hudd, A.E. & King, F. (1911) p. 429
[140] Liversidge, J. (1976) p. 54
[141] Thebert, Y. (1987) p. 332
[142] *I.L.S.* 6085, 68
[143] Crook, J.A. (1967) p. 260
[144] *I.L.S.* 6087, 78; Crawford, M.H. (1996) pp. 395-454
[145] Frere, S.S. (1972) p. 13
[146] 43.10.1. 3-5; Robinson, O.I. (1992) pp. 67 & 71

behind the workshop. A painting of what appears to be a drying rack in the front of a *taberna* was found in the shop of Verecundus, IX.vii.5/7, on the *via dell'Abbondanza* in Pompeii.[147] This persistent encroachment into the portico not only prompted Julius Caesar but also Domitian to order property owners to clean them up.[148] Martial gives a rather graphic description of this predicament, as well as some of the possible hazards encountered.

> 'The audacious shopkeeper had swallowed the whole of the city, and never a threshold kept within its own bounds. You have ordered, Germanicus, our narrow streets to expand, and what was but now a track has become a road. No pillar is festooned with chained flagons, nor is the praetor forced to walk in the middle of the mud, nor is any razor rashly drawn in the midst of the dense crowds, nor does the grimy cook-shop monopolise the whole of the way. The barber, the publican, the cook, the butcher keep behind their thresholds. Behold we have Rome: where of late it was a huge shop'.[149]

While there is merely a reference to flagons of wine chained to the porticoes, the majority of the obstructions presumably consisted of wooden booths laid out over the sidewalk between pillars.[150] It should be noted that these were not random peddlers setting up temporary stalls but retailers in their own premises.[151] These measures obviously worked in the short term but in a successful commercial towns it would not be long before the shopkeepers once again took over the public spaces. As a result, Martial might be describing any busy commercial town throughout the Empire. Libanius describes that even in Antioch, in the fourth century, the great colonnades that crossed the city was also a place of sale.[152] It is clear from the evidence at Sardis that the process of private encroachment was significant by the early seventh century.[153] Shopkeepers did all they could to block the public way and to stop passers-by by erecting obstacles to traffic.

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[147] Moeller, W.O. (1971) p. 188, pl. 46 fig.5
[148] Crook, J.A. (1967) p. 260; Crawford, J.S. (1990) p. 6
[149] VII.lxi
[150] Hor. *Sat.* I.iv.7.
[151] Frayn, J.M. (1993) p. 21
[152] Or xi.254; Liebeschuetz, J.H.W.G. (1972) p. 56
[153] Crawford, J.S. (1990) p. 7

In reality urban spaces conducive to public life rarely had a single-utilitarian space. They are multifunctional and accommodate many activities and uses.[154] It thus became absolutely necessary to establish footpaths and rules for inspection of the highways. Trading streets with their open shop fronts with goods displayed in the public street appeared like modern bazaars. The porticoes and streets became the merchants' property and pedestrians could hardly make their way through them during business hours.[155] Rarely did traders ask for official permission and as MacMullen points out it was their city after all.[156]

With the benefits of a good frontage space came certain civic responsibilities. During the Priory Street excavations at Carmarthen the surface of the street was noted to be well maintained well into the fourth century with seven main successive phases. The response to this by the adjacent dwellings was to raise the surface levels in and around their buildings by constant dumping and re-building.[157] Within periods IIC and IID at Verulamium, clear changes in the floor levels of the portico were noted. This also appears in *insula* xxiv at Augst in Switzerland. Here the foundations of the portico were found to have been laid at differing depths. Furthermore, many of the column bases it supported were carefully aligned with the sidewalls of the shops, and not at regular intervals as might have been expected.[158] A possible explanation for this may have been each individual proprietor was responsible for the drains and walkway surface in front of their *tabernae*.[159] This belief is reinforced by the legislation of Julius Caesar that has been partly preserved in the *Tabula Heracleensis*.[160] This states that the repair and maintenance of public street was to be carried out by the owners of the buildings that flank them. If they failed to do so the contract would be put out to private tender and the owner would be liable for the costs.[161] This is reinforced by the Papinian text, of the Severan period, that further states that 'occupiers of rented accommodation must carry out repairs themselves, if the owner fails to

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154 Crowhurst-Lennard, S.H. & Lennard, H.L. (1993) p. 40
155 Addy, A.O. (1905) p. 96
156 Sen. Ep. 56.2; Dig. 14.3.5.4; Mart. 1.41.3-9; MacMullen, R. (1974) p. 64
157 James, H. (1993) p. 95
158 Walthew, C. V. (1978) p. 347
159 Frere, S.S. (1959) p. 6; (1972) pp. 15, 56 & 74
160 Fontes I no. 13; Crawford, M.H. (1996) pp. 255-91
161 Crook, J.A. (1967) p. 260; Carcopino, J. (1991) p. 58

do so, and deduct their expenses from their rent'. The slightest delay in payment would result in the extraction of double the fee.[162] Even in the fourth century at Antioch shopkeepers owed certain services to the city. Libanius tells us that each *taberna* owner was obliged to do their own share unless they could afford to hire someone else to do the job.[163] The shopkeeper may have been accountable for the walkways but did not necessarily own them. However, the division of the portico, whose public function depended on its continuity, had the effect of making it an annex of the *taberna* and integrating it decisively into the façade.[164]

It is unascertainable if such laws existed in Britain and the effectiveness of legislation was greatly dependent upon the strength and the willingness of the local authority to enforce it. In some cases the disregard for the floor surface of the portico can be seen in its use as a convenient dumping ground for the floor sweeping from adjacent shops. In the early floor levels of period IIB in Verulamium *insula* xiv a great deal of metalworking débris was found outside Rooms 33 and 34.[165] This, as well as encroachments in to the portico, may indicate an absence or general decline in the civil administrative authority. In fact the failure to enforce the separation between public and private property, despite repeated edicts and periodic efforts by provincial governors, in later antiquity has been seen as symptomatic of the decline in both the eastern and western Roman Empire of the concepts of *polis* and *civitas*. Claude sees the encroachment into the public thoroughfare as being associated with the metamorphosis of the Roman city into the Medieval city.[166] It was common in medieval towns to encroach upon public lands when more space was required. In this case the streets, even at the beginning, had been casual in alignment and width, so encroachment tended to pass relatively unnoticed.[167]

Instances of private building encroachment were comparatively rare in Roman Britain and there are only a few examples of where the repair and maintenance of the street was left up to the occupants of the adjacent building.[168] In Carmarthen the public

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[162] Dig. 43.10.1
[163] Or. xlvi, 21; Liebeschuetz, J.H.W.G. (1972) p. 219
[164] Thébert, Y. (1987) p. 332
[165] Frere, S.S. (1972) pp. 42-3
[166] Claude, D. (1969) p. 58
[167] Vance, J.E. (1971) p. 102
[168] Perring, D. (1987) p. 154

thoroughfares were maintained well into the fourth century.[169] Further evidence of the strength to the civic power can be seen during the extension of the forum and basilica complex in London. In the adjacent Leadenhall area was an established *insula* that was effectively cleared to enable the expansion by some form of compulsory purchase or eviction by the civic council.[170] The space within towns would seem to have been rigorously regulated. This is evident from the ordered street layouts and the continued adherence to street and property boundaries. These controls were instituted primarily to facilitate the division of land, to prevent and resolve property disputes and presumably for the assessment of taxation.[171] Land law was complicated and it remained a subject for legal treatment throughout the history of Roman law.[172] While the safeguarding of private ownership was complicated that of public or sacred space was another matter. It was the responsibility of the magistrates to supervise this land but they were few in number and were limited in their capacity to enforce regulations and public land and its environs must have been especially vulnerable as can be seen above.[173] Once this land had been lost it could only be restored to its previously intended use by re-establishing its boundaries.[174] Although private individuals could acquire the ownership of land through the process of *ususcapio* -that is the uncontested possession of land after two years- this did not apply to public land. Private action could not change public property's ultimate status into private land, as there was a clear contrast between public and private land.[175] Although there is documentary and archaeological evidence to show that private infringements onto the street frontages were an ever-present threat, the survival of so many Roman street plans indicate that on the whole it was a danger successfully resisted by the authorities.[176]

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[169] James, H. (1993) p. 95
[170] Milne, G. (1992) p. 16
[171] Perring, D. (1991) pp. 273-4
[172] Some of the Roman authors attribute the origins of the regulations to Numa Pompilius. See Festus p. 505L; Dion. Hal. *Ant. Rom.* 2.74; Plut. Num. 16, Quaest. Rom 15.
[173] Gargola, D.J. (1995) p. 94
[174] Livy 5.50.2; ILS 26, 5923c, 5923b
[175] Gargola, D.J. (1995) pp. 31-2, 130
[176] Ward-Perkins, J.B. (1974) p. 35

v) Munificence

The result of romanization was the creation of urban centres, the characteristics of which could be seen throughout the empire.[177] The porticoes in front of the *tabernae* of Roman Britain may have been an endeavour to emulate the grandeur of the Roman imperial style. The north-west provinces are not known for their examples of munificence and one of the only concessions to civic pride may have taken the form of porticoes along the main streets.[178] Roman Britain in particular seems to be more impoverished in the manner of public buildings, statuary and inscriptions. Although limited, some form of public and private munificence did take place in Britain.[179] Porticoes may simply have been designed to shelter individuals and to demarcate what was exclusively a pedestrian zone from that of more general usage. On the other hand, they may have been primarily constructed as street-side monuments with the convenient side effect of a canopy and all the advantages this entailed.[180] Although some form of covered walk way would seem to have been a typical feature along the main streets of Roman Britain, the extant remains do not allow an accurate reconstruction of their probable appearance. While the foundations of continuous borders along *tabernae* and street frontages hint at the possible uniformity of these walkways without substantive surface remains this must remain conjecture.

Of all the *taberna* façades in Roman Britain, which are not affiliated to a civic structure, that of Wroxeter *insula* viii alone offers the only real opportunity to discuss this enquiry. The most striking aspect of the portico along the western flank of Watling Street is its structural fabric of stone that contrasts with that of the *tabernae* behind which were composed of wattle-and-daub. On a superficial level this would seem to indicate that the sheltered walkways were erected as part of a deliberate policy by the public authorities to create a unified appearance to the street façade along a major thoroughfare.[181] The presence of two sets of post stones in front of sites I and IV indicate that the portico may

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[177] Ward-Perkins, J.B. (1974) pp. 27-36
[178] Poulter, A. (1992) p. 117
[179] Duncan-Jones, R.P. (1985) pp. 28-33; Frere, S.S. (1985a) pp. 34-6; Millett, M.J. (1990) pp. 69-85
[180] Robinson, O.I. (1992) p. 26
[181] White, R. & Barker, P. (1998) p. 81

have been self-sustaining and independent of the shops behind.[182] In Verulamium *insula* xiv, Period IIC, the plans of the *tabernae* become even less regular as the site developed but the portico still remained in existence.[183] The covered walkways along the streets of Colchester are thought to be later insertions.[184] This would further support the theory that they had been constructed by a civic power on public land independent of the shop owners.

A similar pattern to that found in Sites I and IV was discovered in front of Site III at Wroxeter but in this case the portico supports were stone drums.[185] No double support arrangement was found in front of Site V indicating that the frontage wall of the building must have supported the roof of the colonnade. As this was a temple it may have been part of the more general public building programme for the *insula*.[186] However, a similar arrangement was used in front of Site VI. The overall impression from the site is that it was composed of rough workmanship, with different sized blocks, and that many of its components were probably reused from other buildings. Furthermore, the piers or bases built to support the vertical members of the portico seem to correspond to the structures behind and do not follow a visible general symmetry from the road façade.[187]

Given these irregularities it would seem that this colonnade possibly reflected the resources of the individual shopkeepers fronting the street rather than the centralised support of a city or wealthy patron. Bushe-Fox believed that the portico was simply erected as an advertisement for the *tabernae* behind as the complete contrast in material composition between the *tabernae* and portico seems difficult to understand. It seems difficult to comprehend why an individual would invest in an extraneous façade when they could spend their income on their dwelling instead. Discrepancies have also been noted in the layout of such public buildings as the eastern portico of the Wroxeter forum. However, Libanius tells us that the responsibility for new pillars in porticoes that were needed to replace older ones was the task of the shopkeeper behind.[188] This would explain the

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[182] Bushe-Fox, J.P. (1913) pp. 7-8, 14
[183] Frere, S.S. (1972) p. 54
[184] Crummy, P. (1984) p. 28
[185] Bushe-Fox, J.P. (1913) p. 11
[186] Bushe-Fox, J.P. (1914) p. 5
[187] Bushe-Fox, J.P. (1916) pp. 8-9
[188] Or. xlvi.21; Liebeschuetz, J.H.W.G. (1972) p. 219

location of pillars in front of *tabernae,* as at Augst in Switzerland,[189] and *insula* viii at Wroxeter,[190] rather then following a rhythmic symmetry from the street. While the development of colonnaded streets in Roman Britain makes it tempting to believe that this represented a deliberate monumentalisation of the street-side, the evidence from these particular sites does not substantially support this conclusion either way. Despite this, it would seem that beyond the initial allocation of property and the organisation and regulation of access, public involvement in private land was minimal.[191] As Duncan-Jones states too much of a distinction should not be made between public and private financing. When a public building was constructed and paid for by public money the majority of this finance came from the propertied classes.[192]

If these walkways were regular colonnades, such as those found in other parts of the empire, the form of the *taberna* would, from a visual point of view, be primarily related to the façade rather than to the organisation of its internal space. The *tabernae* would be dominated by their façades, visible from the street but not by those working inside, and where specifically designed to impress passers-by.[193] Its exterior symbolised its function as being part of the wider community to attract potential customers under its protective shelter and encourage them to buy. In the more extant remains of Ostia colonnades were simply used to give a individual building a monumental appearance on the side facing the street such as in II.ii.6. The portico could also unite several architecturally heterogeneous structures behind a continuous, harmonious façade as in II.iii.1 and II.iv.1 that shared the same arcade on the *Decumanus Maximus*. The uniform rhythm of the arcade would contrast with the ambiguous one of *taberna* doors.

Colonnades could not only establish a unified idea of a street, but also the city and consigned private space to a position of secondary importance. If a structure was located on a corner and each street had its own portico the façade on both streets presented an uninterrupted covered walkway.[194] A similar arrangement may have existed in

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[189] Walthew, C.V. (1978) p. 347
[190] Bushe-Fox, J.P. (1913) p. 11, (1913) pp. 8-9, (1914) p. 5
[191] Perring, D. (1987) p. 154
[192] Duncan-Jones, R.P. (1985) p. 32
[193] Hirst, P.Q. (1985) pp. 187-8
[194] Packer, J.E. (1971) pp. 32 & 41

Colchester's Culver Street in A.D. 150/200-275/325[195] and at the crossroads of *insulae* I, II, V and VI in Cirencester.[196] A close examination of many of the porticoes that bordered the city streets of the Roman empire frequently reveals their architectural diversity. Their uniformity is illusory, as it is never perfect such as along the *Decumanus Maximus* in both Ostia and Volubilis.[197]

The individuality of the *tabernae* continued to exist although greatly diminished by the colonnade. This is not just the skilful control of form but also an integration of architectural realities.[198] The homogeneous façade at ground level accentuates the collective role of the street while the upper portions of the buildings progressively affirm the relative individuality of the structures. The contrast would be obvious from a distance that leads to a mutual reinforcement of the two elements without necessarily resorting to an explicit hierarchy. The interdependence of the elements is achieved by the tension of their opposing characteristics. If the contradictory architectural features are to enter into a dialogue the differences must be sufficiently pronounced. There are no rules for achieving this as the nature of the opposition can take so many different forms. In the end the principal judge remains the eye of the beholder.[199]

Summary

There seem to have been two types of shelter in front of the *tabernae* of Roman Britain. These consisted of a continual colonnade that linked several *tabernae* or an individual shelter over the shop entrance. The majority of the evidence survives for the former, as a portico required some form of foundation that can be detected archaeologically. For the *tabernarii* a roof covering in front of the *taberna* performed two simple functions. It provided shelter for customers and stock that was displayed outside freeing space on the main shop floor. The streets of Roman towns, particularly the main

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[195] Crummy, P. (1992) p. 32 fig. 3.7
[196] Holbrook, N. (1998) p. 123 fig. 82
[197] Thébert, Y. (1987) pp. 331-2
[198] Barr, V. & Broudy, C.E. (1986) p. 20
[199] von Meiss, P. (1990) pp. 41-4

thoroughfares, linked the gates, the forum and the main public buildings together. Regardless of who constructed these covered walkways the porticoes gave the streets an architectural character and transformed what was a place of passage to a monumental entity in its own right.[200] Above all these covered walkways made an contribution to the experience of urban living in Roman Britain. For a *taberna* the street level was the most critical aspect of the façade as it was here that the greatest degree of interaction took place between the inside and outside. The front must be designed to engage an individual's attention, as this was the aspect of the building that was presented to the public. A portico could even tone down the individual vulgarity of the *taberna* doorway by shrouding it in some common architectural potential. Essentially, the façade acted as a theatrical 'backdrop' intensifying the experience of being in the retail arena.[201]

[200] Ward-Perkins, J.B. (1974) p. 32
[201] Crowhurst-Lennard, S.H. & Lennard, H.L. (1993) pp. 40-1

Chapter X

Display

Sjoberg believed that the retailer in the preindustrial city made little or no effort to gain customers through any attractive display of their wares and that advertising was literally non-existent.[1] However, it is impossible to escape the conclusion that the accumulation of all the elements of the retail arena was to sell products or services. A successful retailer must attract potential customers to their merchandise or services and demonstrate that it surpasses that of their competitors. To these ends the proprietor of a *taberna* must resort to advertisements of some sort. Roman merchants, like their modern counterparts, were confronted with this necessity but lacked the more sophisticated means of communication available today. Nonetheless, energetic entrepreneurs employed various, frequently innovative, methods to advance their products to customers.

When an individual enters into any environment they commonly seek to acquire information concerning that domain or to bring into play knowledge already processed and learnt. The information defines the situation enabling the person to know in advance what to expect and what is anticipated of them. This is especially apparent in the relationship between retailer and patron. When an individual merchant takes on a role they are subtly or implicitly requesting their customers, or more importantly potential customers, to take seriously the impression that is fostered before them. They are asked to believe that the establishment and the proprietor they see actually possesses the attributes they appear to retain, that the tasks performed will have the consequences that are claimed, and that, in general, matters are what they appear to be.[2]

The amount of promotional activity that must have taken place in *tabernae* would probably have varied according to the type of merchandise, the range of commodities and the repeat order rate. For frequent purchase items the level could be modest in relation to turnover such as in established food shops and others that sold essential wares. If customers acquire the habit of shopping in a particular *taberna* they will continue to do so

[1] Sjoberg, G. (1960) p. 201; (1966) p. 182

if the value remains to suits them. As they are purchasing essentials there is little need for deliberation in choice and the customer may be unwilling to sacrifice the time or have the inclination to shop around. For durable items more thought is assigned to the actual acquisition and the need for promotion rises in proportion. Frequently for these goods there are no regular customers to provide a consistent turnover.[3] As a consequence a higher percentage of business actually comes from new customers.

In general there are a number of aims in promotion and these may have been in the minds of *tabernarii*. The most basic of these is to get customers into the *taberna*. Upon entering the shop the customer should be encouraged to make a number of purchases. Once they have made their acquisition they should want to return, to stimulate recommendations and get the shop talked about. The culmination of these objectives was to increase the prestige of the *taberna*.[4]

Essentially any visual display is a form of advertising. Every shop if it was to survive must publicise itself and the one universal and essential promotional medium was the *taberna* itself. Making new customers is more difficult than getting repeat business and promotion is primarily directed towards the former.[5] The exterior must tell passers-by at a glance what type of merchandise is offered, for shoppers are not necessarily looking for a particular *taberna* but for a specific item. The principal purpose of advertising would be to encourage sales by creating a positive attitude to a product, service or shop. It is to produce awareness, then to turn that awareness into emotions favouring the product, and finally to produce a motive for acquisition.[6]

Shopkeepers throughout the empire did their utmost to attract customers and draw attention to their merchandise. Prominent display of the name was an obvious necessity. Some surviving names for Roman inns were 'The Cock' in Rome near the Forum, 'Mercury and Apollo' at Lyons and 'The Elephant' at Pompeii.[7] Another tavern from

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[2] Goffman, E. (1959) p. 28
[3] Ornstien, E.J. (1976) p. 147
[4] Ornstien, E.J. (1976) pp. 141 & 162
[5] Ornstien, E.J. (1976) p. 186
[6] O'Brien, L. & Harris, F. (1991) p. 40
[7] Friedländer, L. (1907) p. 292

Pompeii was simply named after the proprietor, 'Hyginus Firmus'.[8] Shop signs were probably shown on the *fascia* going across the width of the *taberna*.[9]

Signage had to work as a unit with the exterior style and materials of the *taberna* façade.[10] Care had also to be taken so that the sign could be seen from all vantage points, on both sides of the street, approaching from left and right. One of the disadvantages of placing a sign on the *taberna* façade was that they were more often above the eye-level of people on the footpath immediately in front of the shop, and for this reason some *tabernae* must have had hanging signs at right angles to the frontage. The shop name should be easily readable which has a priority over distinctiveness. Signs need not necessarily be grammatically correct, as some contained mistakes; they were merely intended to encourage customers.[11] One way to overcome this conflict was to combine plain letters with a distinctive symbol. The emblem then became the principal visual element in the shops identification system.[12] The signs for Roman inns were often in the form of animals and an elephant led by a pygmy belonged to Sittius at Pompeii, VII.i.44/45.[13] A famous polychrome terra-cotta sign from Pompeii shows two men carrying an amphora and this may have belonged to a wine seller. A goat may be for dairy products or that of a cheese monger and a mill and donkey for a baker or miller.[14] The tools and implements of the trade were also depicted such as those used by masons and labourers.[15] Barbers displayed scissors or mirrors outside their premises.[16] Many of these signs were made in moulds and may have been the mere symbol for a trade rather then *taberna* signs illustrating the activities within but they would have worked in the same fashion.[17]

The majority of signs must have consisted of perishable materials. Two possible indications of signs existed in Roman Britain. The first is R.I.B. 712 which is an inscription found in Malton that that gives a direct reference to a goldsmith running a

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[8] Sage, E.T. (1916) p. 205
[9] Bakker, J.T. (1994) p. 80
[10] Barr, V. & Broudy, C.E. (1986) p. 22
[11] C.I.L. XIV.4015 has *balineus* instead of *balineum*. C.I.L. X.7296 is in Latin and Greek and contains mistakes in both languages. Paoli, V.E. (1975) pp. 34-5
[12] Ornstien, E.J. (1976) p. 165
[13] Frieländer, L. (1907) p. 291; Engelmann, W. (1929) p. 125
[14] Guhl, E. & Koner, W. (1994) p. 520
[15] Gusman, P. (1900) p. 190; MacKenzie, W.M. (1910) p. 28; Mui, A. (1973) p. 287; Paoli, U.E. (1975) p. 34
[16] Alciphron 3, 30. Lucian, Ind. 29

shop.[18] It is clearly a building stone that by its nature was displayed and may inadvertently have acted as a *taberna* sign as it describes the premises. Another is the fragment of a very large shoe found in the Walbrook. This may have been a sign hanging outside a cobbler's as the shoe could only have fitted a person some 3.7m (10 feet) tall.[19] Sometimes the front of the *taberna* was painted in various colours to attract the attention of passers-by such as in front of a Pompeian shop in *Regio* IX.5.[20]

Throughout the streets of Pompeii numerous signs and advertisements were found around *taberna* doors.[21] A *taberna* at VI.14 had a painting on the outside wall advertising drink prices.[22] In the shop of a certain Zosimus, III.iv.1, a partially destroyed *proscriptio* states that 'terra-cotta pots of all kinds are on sale here'.[23] One *taberna* at Antibes had a notice outside that stated 'Listen traveller, come inside if you please. There is a list of prices that tells you everything'.[24] This served to invite customers into the *taberna* and at the same time appeal to the curious.[25] *Tabernae* frequently defaced the simple and severe architectural forms of patrician houses by plastering garish trade signs on the wall.[26]

In modern retail thought an alluring display is considered the best and cheapest advertisement a retailer could have.[27] The effective display of merchandise is a highly skilled craft. The arrangement of a shop display and interior is the most important and most difficult part of the whole promotional effort. It is here that all aspects of promotion - advertising, the shop-front, and reputation- will be fulfilled or frustrated.[28] Apart from the stimulation of impulse buying a shop layout must also be aimed at obtaining sales of extra items related to the original purchase. The layout and display are substitutes for people and

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[17] Dyer, T.H. (1867) pp. 84-5; Curtis, R.I. (1985) p. 209
[18] Clark, M.K. (1935) p. 113; Mitchelson, N. (1964) pp. 209-61; Wenham, L.P. (1974) p. 20; Robinson, J.F. (1978) p. 6-10
[19] Liversidge, J. (1968) p. 179
[20] Gusman, P. (1900) p. 190
[21] Adams, W.H.D. (1872) p. 58; Guhl, E. & Koner, W. (1994) p. 523
[22] Wallace-Hadrill, A. (1994) pp. 206 & 281
[23] Frank, T. (1940) p. 260
[24] C.I.L. xii.5732
[25] Balsdon, J.P.V.D. (1969) p. 153
[26] Frank, T. (1938) p. 225; Wallace-Hadrill, A. (1991) p. 252 from Maiuri (1960) p. 188
[27] Winstanley, M.J. (1983) p. 60
[28] Ornstien, E.J. (1976) p. 171

must say visually what sales staff would say orally.[29] Essentially the customer should be able to understand the product with a minimum of sales assistance.[30]

Roman retailers were not unaware of the concept of arranging their products in some form of enticing display to attract the attention of potential customers. From a distance the storefront was the first contact between the shopper and merchant. Therefore, retailers would try to control the customer's perception of the *taberna*. The concept and merchandise of the *taberna* were reflected in the design and layout of the shop front, otherwise potential customers might pass by without understanding the store.

This is apparent from the funerary reliefs of merchants that not only depict themselves as being proud of their trade but also in the appearance and exhibition of their goods. An example of this is the first or second century bas-relief in the Vatican Museum of the freedman Cornelius Atimetus. This displays his wares that is a rich and varied choice in sickles, pruning-knives, and long carving knives. The relief does not show the merchandise in a static form, as the owner himself seems to be in the act of selling a knife to a customer (Figure 69).[31] In I.vi.12, from Pompeii, a little more than a metre from the threshold a mass of objects was found. These consisted of numerous iron implements that included 30 large sickles, 30 locks, at least 30 keys, *strigiles*, knives of various kinds and some bronze decorations and bridles for horses.[32] A painting of a workshop in front of IX.i.7 in Pompeii depicts a woman sitting behind a counter, which is covered with heaps of varied objects, selling a pair of slippers.[33] There is also the relief of a blacksmith or locksmith in the Aquileia Archaeological Museum that depicts tools and the product produced (Figure 70).[34] Others used the actual structure of the portico itself to display their wares from poles hung on rails outside the shops. This can be seen on the funerary reliefs of a game butcher and a cloth seller in Rome (Figure 70).[35] In the Byzantine shops at

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[29] Ornstien, E.J. (1976) p. 175
[30] Barr, V. & Broudy, C.E. (1986) p. 18; Green, W.R. (1991) p. 42
[31] Guhl, E. & Koner, W. (1994) p. 524
[32] Della Corte, M. (1925) p. 14; Engelmann, W. (1929) p. 130; Wallace-Hadrill, A. (1994) p. 189
[33] Sage, E.T. (1916) p. 205; Della Corte, M. (1925) p. 7
[34] Veyne, P. (1987) p. 133
[35] Veyne, P. (1987) p. 83

Sardis four cauldrons and vessels were found in the colonnade that were probably set up to attract customers.[36]

The *taberna* display was the mechanism that attempted to present merchandise to the shopper in its most favourable light. It permitted the customer to evaluate and select products for purchase. Essentially the *taberna* display, and on a wider scale the whole retail arena, had two elements, product presentation and product evaluation. The display must emphasis the items and not detracts from them. In most cases this evaluation takes place in the area just in front of or adjacent to the commodity where the customer can examine the product or have the salesperson explain its virtues. Given the design of the retail arena this process probably took place in front of a counter. Furthermore, there must be sufficient space for shoppers to get past browsers standing in front of the display and to give those examining the products enough space to do this comfortably.[37] To this end the covered walkway in front of the *taberna* came into its own.

The *taberna* façade was the major promotional medium. A *taberna* advertised itself so whenever possible, prime sites were sought and *taberna* frontage designed to allow for the maximum display of goods and to act as a 'silent salesperson'. It is evident from the wide-open doorways that most shops felt that an uninterrupted view of the interior was important. Doors were more important then windows and ample and inviting thresholds were desirable. Ever available space was utilised and doorposts could also be used to promote the merchandise within. Those of bookshops were completely covered with advertisements.

> 'There is a shop opposite Caesar's Forum with its door-posts from top to bottom bearing advertisements, so that you can in a moment read through the list of poets. ...'

As a result of the wide-open doorways, and the position of the counter at the threshold, all the activities within the *tabernae* would be visible to those outside. While in the presence of others, the retailer would typically reinforce their activities with signs that

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[36] Waldbaum, J.C. (1983) p. 91; Crawford, J.S. (1990) pp. 50 & 90
[37] Green, W.R. (1991) pp. 20-1

dramatically highlight and portray confirmatory facts that might otherwise have remain unapparent or obscured to the customer. If an individual's activity is to become significant to others, it must be oriented in such a way that it will express what they wish to convey to the client during interaction.[38] Merchants may have found that they must charge higher prices for items that appear intrinsically inexpensive in order to compensate for slack periods, transportation costs and so forth, that never appear before the customers' eyes.[39] In this way the artisan could illustrate the amount of work involved in the production of a product reinforcing its value before potential customers.

Even under the best conditions, an open front could give a blurred impression of the retail store and its commodities. This would certainly have been the case in a *taberna* that offered a variety of products where the conglomeration of merchandise meant that specific details and values could not be perceived. however, it is possible that the stock in *tabernae* would not have been large.[40] This was unlikely to attract as many customers as specific examples of goods offered in a set window display. A compromise had to be reached to resolve this dilemma as displays can take up valuable selling space and consume time arranging.[41] Despite all these efforts, trading difficulties must have been compounded by the small amount of selling space, which restricted the range of goods that could be displayed, hampered customer access and internal movement and constricted the scope for presenting merchandise in attractive and variable ways.[42]

As in the custom of the *salutatio* that took place in the atrium of the *domus* the customer was a guest.[43] This shows an interesting parallel in the purpose of the *atrium* and *taberna* area in that they perform the same function but at different social levels. The invitation may be by advertisement or more simply by the *taberna* itself. The customer then goes to the *tabernae* either with a distinct purpose of purchasing some particular

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[38] Goffman, E. (1959) p. 40
[39] Goffman, E. (1959) p. 42
[40] Richmond, I.A. (1966) p. 76
[41] Ornstien, E.J. (1976) pp. 166-8
[42] Davies, R.L. (1984) p. 305
[43] Under the early empire lower-class clients were invited to a meal or a gift of money or food from their patron and this was known as the *salutatio.* Horace Epp. 1.7; Martial iii.60.1-10; Friedländer, L. (1913) p. 77-81; Hornblower, S. & Spawford, A. (1996) p. 1350

article, or else to look at the merchandise in response to the invitation to see if there was anything worth purchasing.[44]

Advertising could also have been done audibly, for which there will never be archaeological traces but is known from the ancient texts. Shopkeepers would have added their own voices to the noise and hustle of the street to proclaim the character and virtues of their wares. Tavern keepers, where cooked food was sold, and salt-provision dealers, *salarii*, sent their boys around the streets and baths offering cooked sausages and similar foods for sale.[45] Peddlers of sulphur matches, retailers of sausages, warm puddings or pies thronged the streets of Rome[46] and baker boys retailed their wares on street corners.[47] Each of the peddlers called out in their own particular intonation, as did shopkeepers, to attract the attention of passers-by to their wares.[48] It may be presumed that peddlers would also have played an important part in this simple system of distribution.[49]

The shop front was the exposed transparent surface of the *taberna* that attracted passers by.[50] The most obvious purpose of the *taberna* exterior was to attract customers and sell commodities. The wide-open front, but also the fact that the *taberna* owners have built their shop fronts right up to the very limit of their property, emphasise the retailers' motivation. Covered walkways offered protection from the weather and to allow display.[51] On the main streets there was a tendency towards the maximisation of the street frontages. Merchants expected their storefront to help them achieve an edge over their competition. This was important, as the variety of merchandise the vendors sold seems to have been limited, with neighbouring stores carrying much the same or similar goods. The design of the exterior attempted to pre-sell merchandise to consumers.

The whole *taberna* itself was an active selling tool, a promotional device designed to attract people to shop. The retail arena added to a product or service's image of worth and value to the buyer. Hence the *taberna* had many interlocking systems. In general the

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[44] Beable, W.H. (1925) p. 34
[45] Seneca Ep. 56.2
[46] Martial. I.41.2-16; XII.57.14
[47] Mart.6.64.21; 14.223 See also Petr., 38, Suet., Vit.,12; Sen. Q.N. 4.13.8; Ovid, Ars Am 1.421-422
[48] Paoli, U.E. (1975) p. 33
[49] Frank, T. (1940) p. 280; Teltcher, S. (1991) pp. 167-87
[50] Mun, D. (1981) p. 89
[51] Barr, V. & Broudy, C.E. (1986) p. 19

taberna was a dynamic organism that changed and developed. Just because a retailer opened on a particular street, erected a sign, and sold goods there was no guarantee that sufficient customers would come to return a profit on operations.

Summary

Despite all these ingenious efforts at promotion, whether they were consciously or subconsciously carried out by retailers, trading difficulties would still have existed. This was compounded by the restricted amount of selling space, which in turn limited the range of wares that could be displayed. However, this is a judgement based on modern marketing dogma and does not truly reflect contemporary thought or practice. Regardless of all the supposed limitation the retail arena was evidently successful as is illustrated by the quantity and distribution of inscribed artefacts and the continually developing architecture and decoration of the *tabernae*. There was probably no need for other advertising media other than those already possessed. The main difference between *tabernae* and modern shops was that the former establishments existed to fulfil customers known wants rather than being designed to attract customers and to create new wants. The majority of the activities in the retail arena took place at the threshold. All produces and services were generally within easy view of the customer for them to scrutinise. The fact that the typical *taberna* was flush with the street, with wares spread onto the thoroughfare, is in a sense a reflection of the state of the economic organisation of Roman Britain and commerce in general through out the empire.

Conclusion

This thesis has been concerned with creating a credible reconstruction of the *tabernae* of Roman Britain from the actual buildings themselves. This has been achieved by concentrating on the production of retail space to describe and explain the phenomenon of the *taberna* in its contemporary form. The manner in which *tabernae* reflect the social and economic environment of the province of Britain can then be observed.

It has been the consensus throughout this thesis that commercial buildings are more sensitive and responsive to the economic and social climate than monumental structures. The study of *tabernae* has largely been ignored at the expense of public buildings or prestige dwellings. *Tabernae* must have accounted for a large part of the built up areas in towns. They would have been a very visible and familiar part of urban life. With their open fronts and goods spread into the street they must have left as much an impression of what urbanisation was about that monumental structures. Retailing was an essential component of the urban environment.

A comparative approach to the study of the nature, size and location of *tabernae* in towns can give clues to the broader issues concerning social identity and function. This integrated approach to the building patterns of Roman towns will provide a more genuine view of urban development than consideration of a single building type or class of structure by itself and this is why the study of *tabernae* is significant. The results gained by this analysis of *tabernae* are far from ideal but it is certainly more representative of the evolution of these settlements in Roman Britain than any one building type.

The origin of the *taberna* form seems to be Italian and was a Roman import into Britain. Contemporary attitudes in Italy to *tabernae* were diverse, from distain by the social élite to pride by those that lived and worked within. Regardless of how they were viewed they were an important element of the urban framework.

Excavations have revealed that Britain was a province that had a great diversification of structures from the simplest of strip-buildings to elaborate basilicas. Britain's geographical location at the north-west edge of the empire did not mean that its structures were isolated from developments that took place in the centre. The initial consequence of the Roman invasion was that building materials and techniques remained

substantially as they were. Instead of dramatic changes existing social systems were adopted and formed into Roman norms and methods. Although Britain would have been affected by regional factors there is little evidence to show that it developed an identity of its own that was very distinctive from the rest of the empire. There was clearly an evolution of building types that reflected the growing confidence and self-reliance in urban life and also the wealth of *taberna* owners. More complex structural techniques were adopted, that were at first unfamiliar to the native Britons, as shopkeepers invested their capital into their shops. This eventually evolved into more solid structures that were built of masonry and or founded on masonry footings that could outlive their original builders.

It more than likely that the various construction patterns found in the major towns, especially during the primary settlement of Britain, reflect civilian rather military building methods. Although there is a similarity in building practice this varies greatly from one structure to another and there is no notable unity of composition of decorative schemes. In fact the *taberna* structures reflect a high degree of distinctiveness and individuality that is not found in military buildings. Most districts of the Roman empire were self-sufficient in builders, as were the Iron Age Britons, and it would seem surprising if this was not the case in Roman Britain. The new settlements must have attracted immigrants from the native centres as well as from other parts of the empire. The Roman conquest did not stifle development but encouraged and stimulated it. The practice of self-help housing would have greatly benefited the spread and dissemination of new ideas, customs and above all technologies. It was all individuals and groups whose actions, aspirations and conflict of interest collectively contributed to the overall form and functioning of the empire. The development of architecture even on the simple level of the *taberna* reflects an aspiration towards and a conscious acceptance of Roman values. As capital accumulated it was invested in buildings that made a provision for an evolution of construction techniques. This may perhaps explain what is seen as the rapid romanization of the urban centres of which trade and *tabernae* played no mean part. In spite of their unpretentious architecture, a lively commercial atmosphere seems to have existed from the very beginnings of the Roman settlement of Britain.

The purpose and function of *tabernae* had an influence on the type of building plan. Contemporary plans for these utilitarian buildings have not survived and were probably

only crude draws if they existed at all. In design they are simple and as an architectural unit so uncomplicated and malleable that it could be adapted to almost any purpose. It could develop from a retailing outlet of two rooms to being part of a more evolved dwelling. The strip-building form is likely to have been a development from an attempt to insert as many structures as possible into what was an important retail location. As a simple architectural form they could evolve and be adapted by the addition of appendages to the back of the building or the amalgamation of neighbouring property. This clearly represents as higher level of prosperity for the *taberna* owners and a willingness to express this in larger and more expansive premises. The great number of strip-buildings emphasises the commercial attraction to the early settlements but there is little evidence of any corporate retail planning above that of the accumulation of capital by individual retail owners. The *taberna* plan was a typical feature of the urban settlements of Roman Britain that had evident similarities to shops in the rest of north-western Europe and Italy itself. The *taberna* was arguably the most adaptable of the entire myriad multipurpose building types created by Roman architecture.

The study of room usage is important as it is through this knowledge that the function of these buildings as *tabernae* can be inferred. The distinctive characteristic of *taberna* structures throughout the empire was that they amalgamated the function of a shop and workshop with domestic space. At the most basic level the frontage was utilised for the purpose of manufacture and retailing while the activities of living were assigned to the rear of the building. Some distinction can be drawn between the *tabernae* that were involved in production and those in the business of retailing, but the weight of archaeological evidence is for the former industrial function. This probably reflects a bias in the surviving artefacts but it is more than likely that workshops out numbered shops, as most *taberna* would have produced their own merchandise, or finished goods that they sold themselves.

A great deal in made of the size of the manufacturing units as these were small. However, it was probably not the overall size that was important for the economy but the number of *tabernae* that was important.[1]

[1] Hopkins, K. (1978) p. 53

A more accurate term for these buildings is to describe them as *taberna*- or shop-dwellings. The purpose of the chambers to the rear of the *taberna* buildings is more difficult to define but enough survives to make social judgements not only for the dwellings themselves but also for the much wider community. In the smaller *taberna* it is more than likely that the same space was utilised for different activities at various times. In the larger buildings not only was there a division between occupational and domestic zones but also one between what is perceived to be public and private. This makes it apparent that the *tabernae* of Roman Britain had emulated many of the spatial conventions that existed in the rest of the Empire. Based on this it is likely that shopkeepers had also assimilated the social divisions of Roman dwellings and that of society. At the same time a degree of regional diversification must have endured to varying degrees.

The formulation of any settlements is the result of the roads and buildings therein. Particular structural forms and building types can be found in particular regions and be distinguished within the urban environment. The factors and influences that created street patterns and any subsequent changes to these patterns can be very diverse. This is especially the case for *tabernae* that can range from efforts to achieve profit maximisation from a particular location to the whims of customer fashion. Normative approaches have been adopted by retail geographers to offer an explanation for the retail location within towns and cities. These may appear to far removed from the actual circumstances of the small retailer. Roman shopkeepers, like their modern counterparts, sought a location that was amenable to both themselves and their customers. Despite this a general pattern to location is evident and a common knowledge of this would allow someone entering a settlement for the first to find their way to the centre by the number of *tabernae* along the street.

The use of geographical location analysis can be seen to be immensely valuable as it can offer an interpretation for settlement formation and the location of structures and activities within. The characteristics of the retail environment suggest that there was a relatively predictable pattern for the location of *tabernae*. It is highly probable that for some *tabernae* location was immensely important for success as they sought out and competed with others for a central location or some other commercially advantageous site. Once a site had been chosen the attributes of the location became less crucial as it was up to

the character and the ability of retailer to take advantage of the site to achieve a profit. The image emerges that the principal streets of Roman Britain bustled with artisans and retailers. Despite this the major towns were not homogenous in character, as there were clear differences in the functional and social character of some streets. In general the topographical analysis of the settlements of Roman Britain shows how inextricably *tabernae* were bound into the urban framework

The development and evolution of the construction methods, plans and location of shops can be used to explain the economics of *tabernae*. The arrangements of a building are seldom random and this can be used to explain social behaviour. In most cases, but especially in the retail environment, these changes reflect the economic circumstances of the inhabitants of the dwelling in question. If this evolution is examined on a wider scale it can have far reaching implications for the surrounding area whether it is for the immediate settlement or the whole of society. There is little doubt that the initial settlement of Roman Britain was at a time of great instability. At the same time it was a period of great economic potential especially for the enterprising retailer. The motivation to adopt and develop better building methods and more ornate *tabernae* lay within the realm of the inhabitants themselves. Upward mobility depended not on the actual structures but on access to better education, security and income. Essentially, *tabernae* reflected the economic and social development of the retailers and artisan. The evolution of shops was a continual process and illustrated an ever growing investment in *tabernae* and towns and also an increase in the degree of individual stability and confidence that is not apparent in the earlier structures.

Although *tabernae* served as a place of residence their primary function was to retail and this is reflected in their architectural design. The three main structural elements of a *taberna* were the counter, door and covered-walkway and these were the selling tools of the shop. They were inextricably linked and together created the retail arena.

There are many examples of masonry counters in Italy but none has been found in Britain. As counters were an important prerequisite of a *taberna* it can be presumed that counters were constructed in wood as seems to be indicated by many reliefs. If this were the case then most of the customer interchange would probably have taken place in front of the counter that was probably located at the threshold.

There is enough evidence in Britain to show that the doorway of *tabernae* were similar to those in Italy. With their wide-open doorways the shopkeeper was able to focus on the display of their goods and services. It was this form of public display, to blatantly make profit, that made them appear sordid in society. However the *taberna* door was able to gain power by its ability to control and exploit visual penetration from the outside and sell merchandise.

The façade was the transparent surface of the *taberna* that was used to attract customers and to sell merchandise. The motivation of the shopkeepers is clearly illustrated by the wide-open doorway and the building of *tabernae* right up to the very limit of the front boundary. A portico or canopy allowed retailers to display their wares outside the confines of the *tabernae* and allowed a further maximisation of the shop frontage. It can be seen that the design of the façade was an attempt to pre-sell merchandise to a potential customer before they entered into the store selling zone or passed the *taberna.*

The evolution and development of *tabernae* are difficult to condense as more than any other structural type they were subject to many and varied individual circumstances. The *taberna* was a dynamic organism that changed and developed to suit the needs of its inhabitants. The whole *taberna* was an active promotional device designed to attract customers to the wares produced and sold inside. The retail arena had many interlocking systems the culmination of which produced a distinctive form of architecture. A thriving and competitive retailing community existed in the major settlements of Roman Britain and is clearly illustrated by the existence of *tabernae*. The importance of *tabernae* in Roman architecture and in Romano-British society can hardly be overestimated. To be successful in the retail arena the shopkeepers had to be hard driving business people with a flair for showmanship, gambling instinct and knowledge of spatial awareness. In conclusion, the *taberna* structure can be seen as a vehicle for the realisation of the expectations of the retailers and artisans of Roman Britain.

Abbreviations

A.A.	Archaeologia Aeliana.
A.A.A.G.	Annals of the Association of American Geography.
A.J.	Archaeological Journal.
A.J.A	American Journal of Archaeology
A.J.A.H.	American Journal of Ancient History.
A.J.Ph.	American Journal of Philology.
A.N.R.W......	Aufstieg und Niedergang der Römischen Weld.
Antiq. J.	Antiquity Journal.
Antiq.	Antiquity.
A.L.	Archaeology in Lincolnshire.
Arch. Camb. ...	Archaeologia Cambrensis.
Arch. Cant.	Archaeologia Cantiana.
B.A.R.	British Archaeological Report.
B.A.R.s.	British Archaeological Report (international series).
B.A.S.O.R.	Bulletin of the American Schools of Oriental Research.
B.B.C.S.	The Bulletin of the Board of Celtic Studies.
B.N.F.A.S.	Bulletin of the Northamptonshire Federation of Archaeological Societies.
Brit.	Britannia.
C.A.	Current Archaeology.
C.P.	Classical Philology.
C.R.	Classical Review.
C.B.A.	Council for British Archaeology.
C.I.L.	Corpus Inscriptionum Latinarum.
C.J.	Classical Journal.
C.T.P.	Corpus Topographicum Pompeianum.
E.G.	Economic Geography.
E.H.R.	Economic History Review.
E.P.(A)	Environment and Planning.
E.P.(B)	Environment and Planning: Planning and Design.
H.F.C.A.S.N. ..	Hampshire Field Club Archaeological Society Newsletter.
I.L.S.	Inscriptiones Latinae Selectae.
J.A.S.	Journal of Archaeological Science.
J.G.S.	Journal of Glass Studies.
J.R.A.	Journal of Roman Archaeology.
J.R.P.S.	Journal of Roman Pottery Studies.
J.R.S.	Journal of Roman Studies.
J.R.Z.M.	Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz.
L.A.	London Archaeologist.
L.A.M.A.S.	London and Middlesex Archaeological Society.
L.E.	Land Economics.
L.H.A.	Lincolnshire History and Archaeology.
M.A.A.R	Memoirs of the American Academy of Rome.
N.A.	Norfolk Archaeology.
Nor. A.	Northamptonshire Archaeology.

N.N.A.S.	Transactions of the Norfolk and Norwich Archaeological Society.
O.J.A.	Oxford Journal of Archaeology.
Op. Arch.	Opuscula Archaeologica.
P.A.	Popular Archaeology
P.B.A.	Proceedings of the British Academy.
P.B.S.R.	Papers of the British School at Rome.
P.& P.	Past and Present.
P.H.F.C.A.S ..	Papers and Proceedings of the Hampshire Field Club and Archaeological Society.
Proc.C.A.S.	Proceedings of the Cambridge Archaeological Society.
Proc.P.S.	Proceeding of Prehistoric Society.
P.S.A.L.	Proceedings of the society of Antiquaries London.
P.S.A.S.	Proceedings of the Scottish Antiquarian Society.
R.C.H.M.	Royal Commission on Historical Monuments.
S.A.R.	Scottish Archaeological Review.
S.L.P.	Somerset Levels Project
T.A.P.A.	Transactions of the American Philological Association.
T.B.G.A.S.	Transactions of the Bristol and Gloucester Archaeological Society.
T.D.G.A.S.	Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society.
T.E.A.C.	Transactions of the Essex Archaeological Society.
T.I.B.G.	Transactions of the Institute of British Geographers.
T.S.A.S.	Transactions of the Shropshire Archaeological Society.
T.W.N.F.C	Transactions of the Woolhope Naturalist Field Club.
W.A.	World Archaeology.
Y.A.J.	Yorkshire Archaeological Journal.

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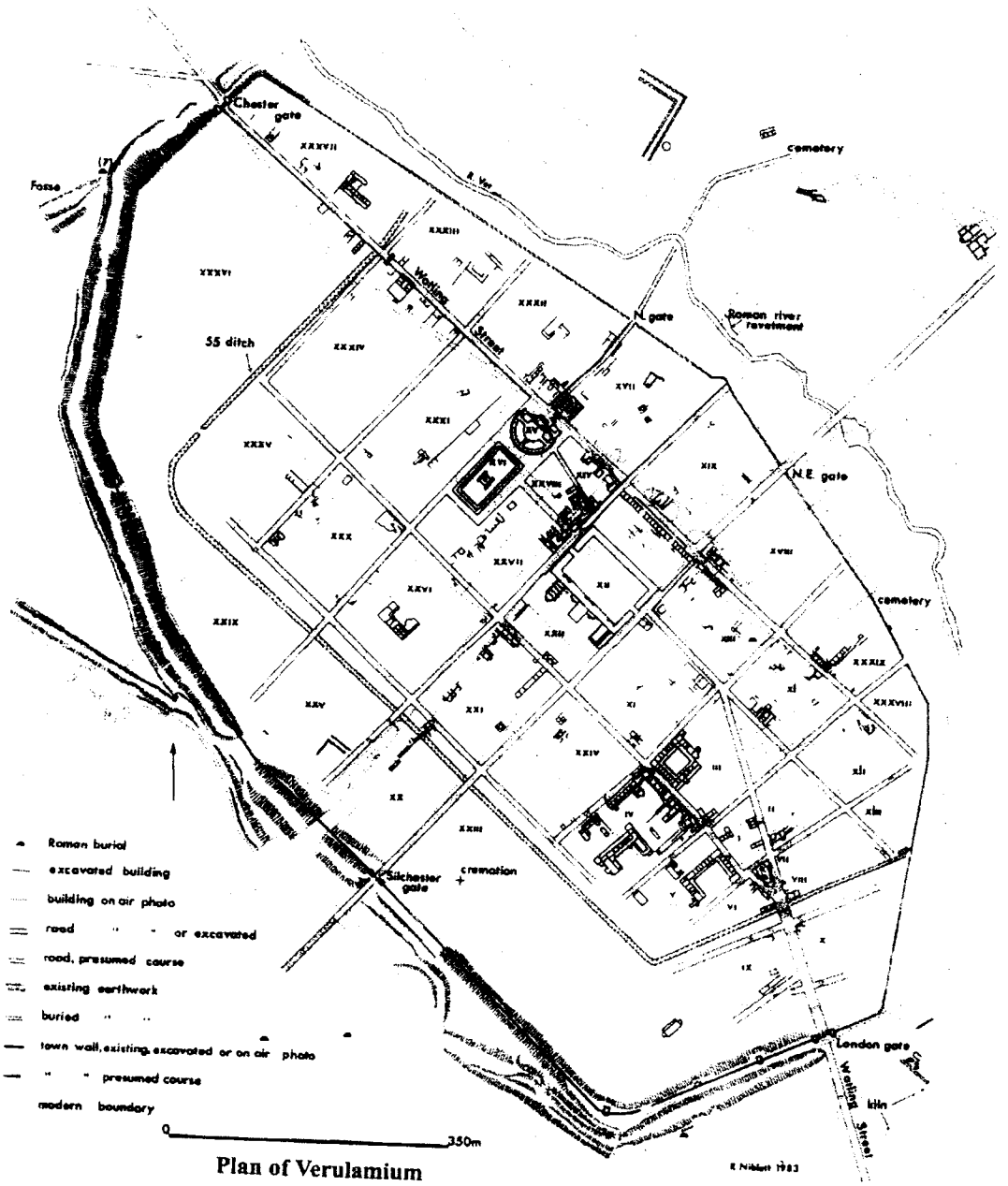
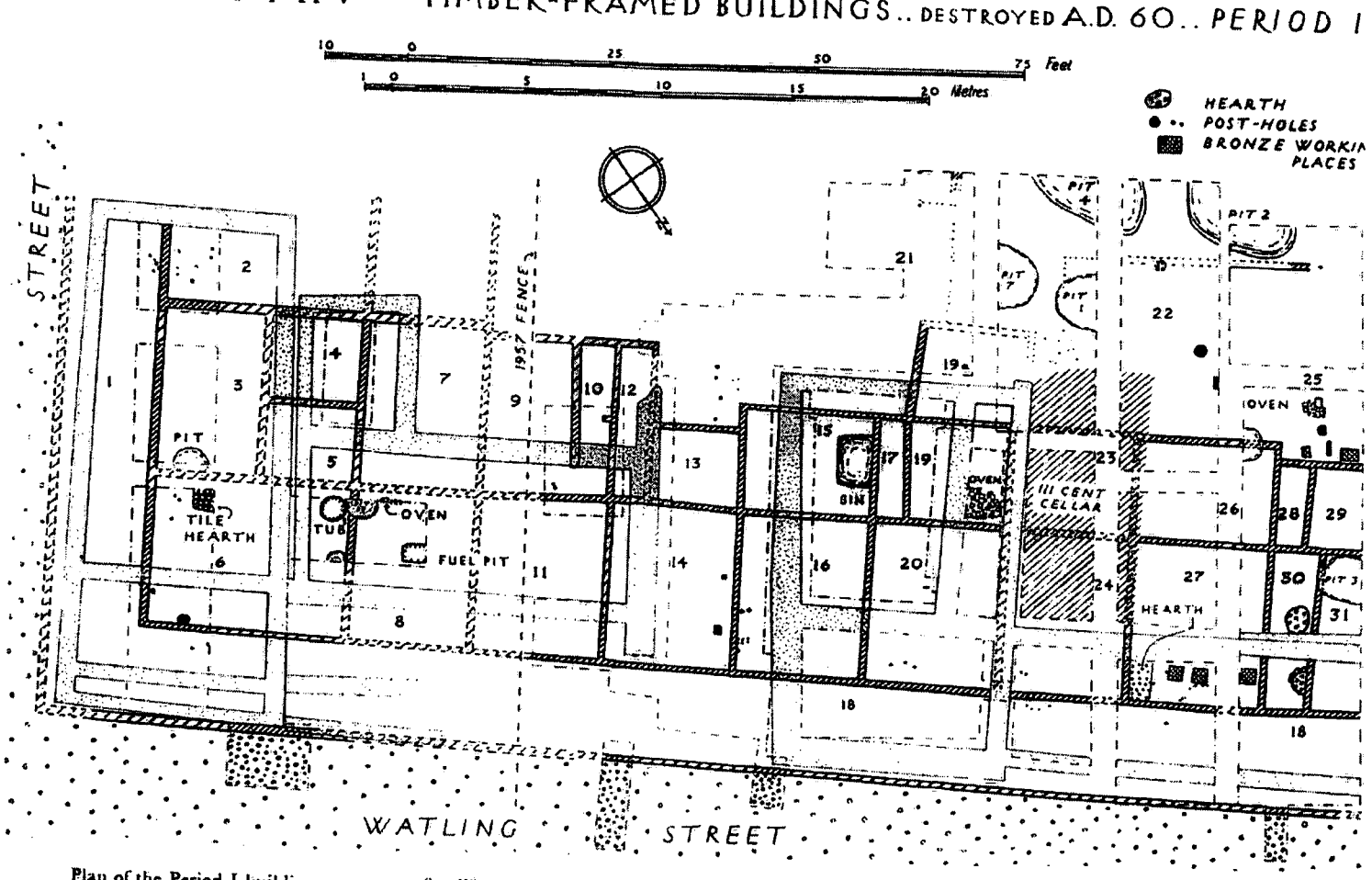
Figure 1

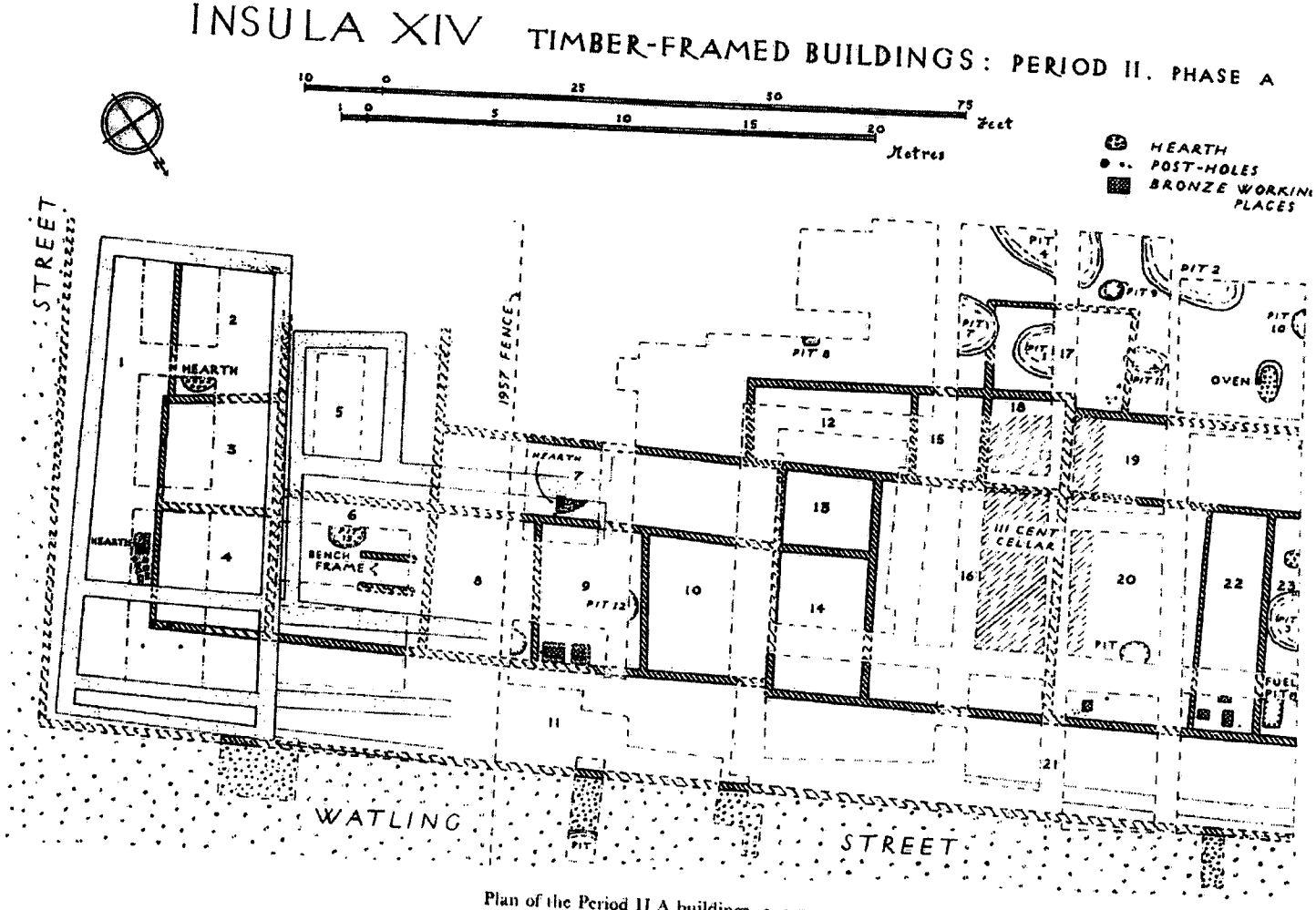


Plan of Verulamium



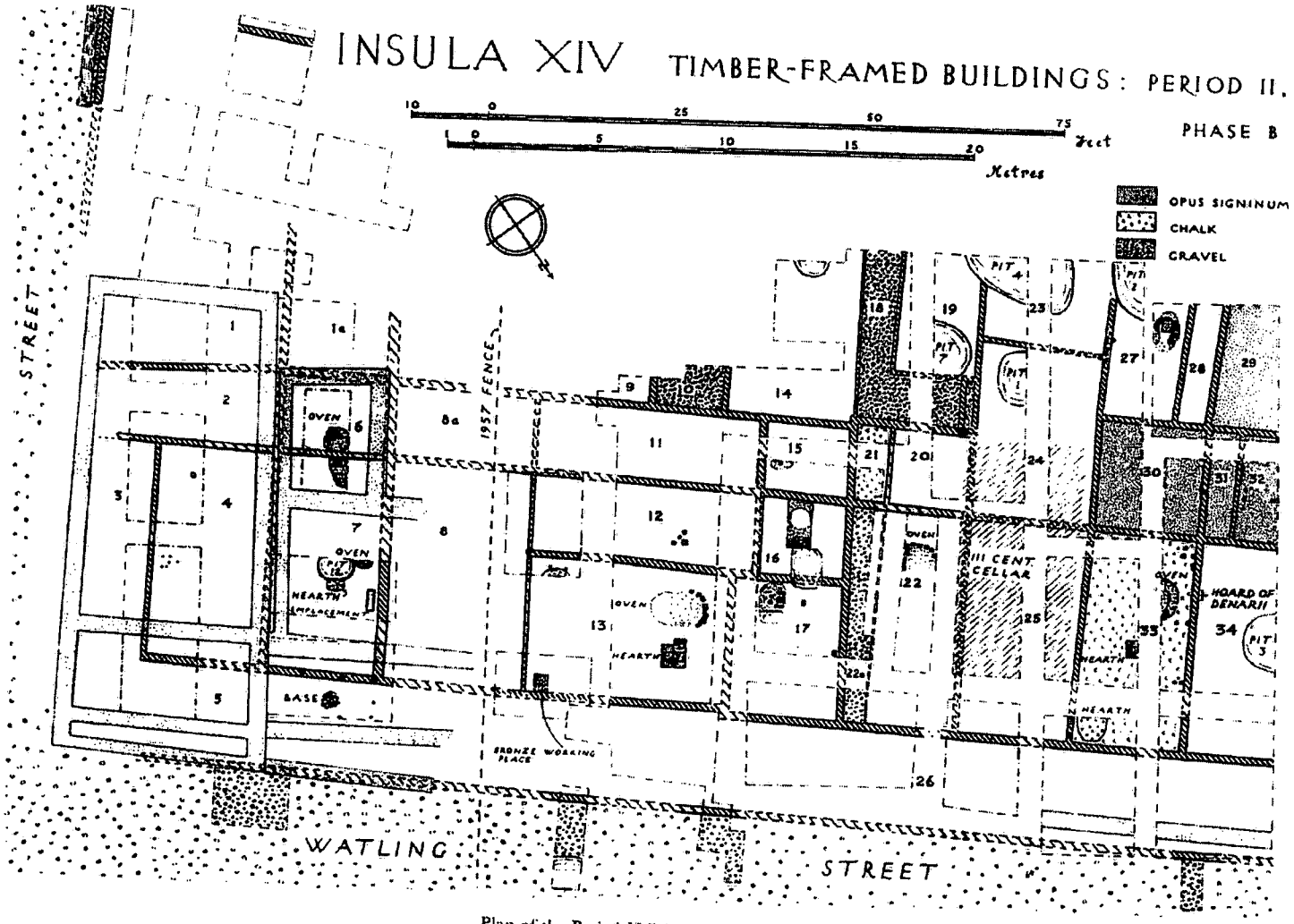
Plan of the Period I buildings, *c.* A.D. 49–60. The deep foundations of the Period III masonry buildings are here lightly indicated in stipple

Figure 2



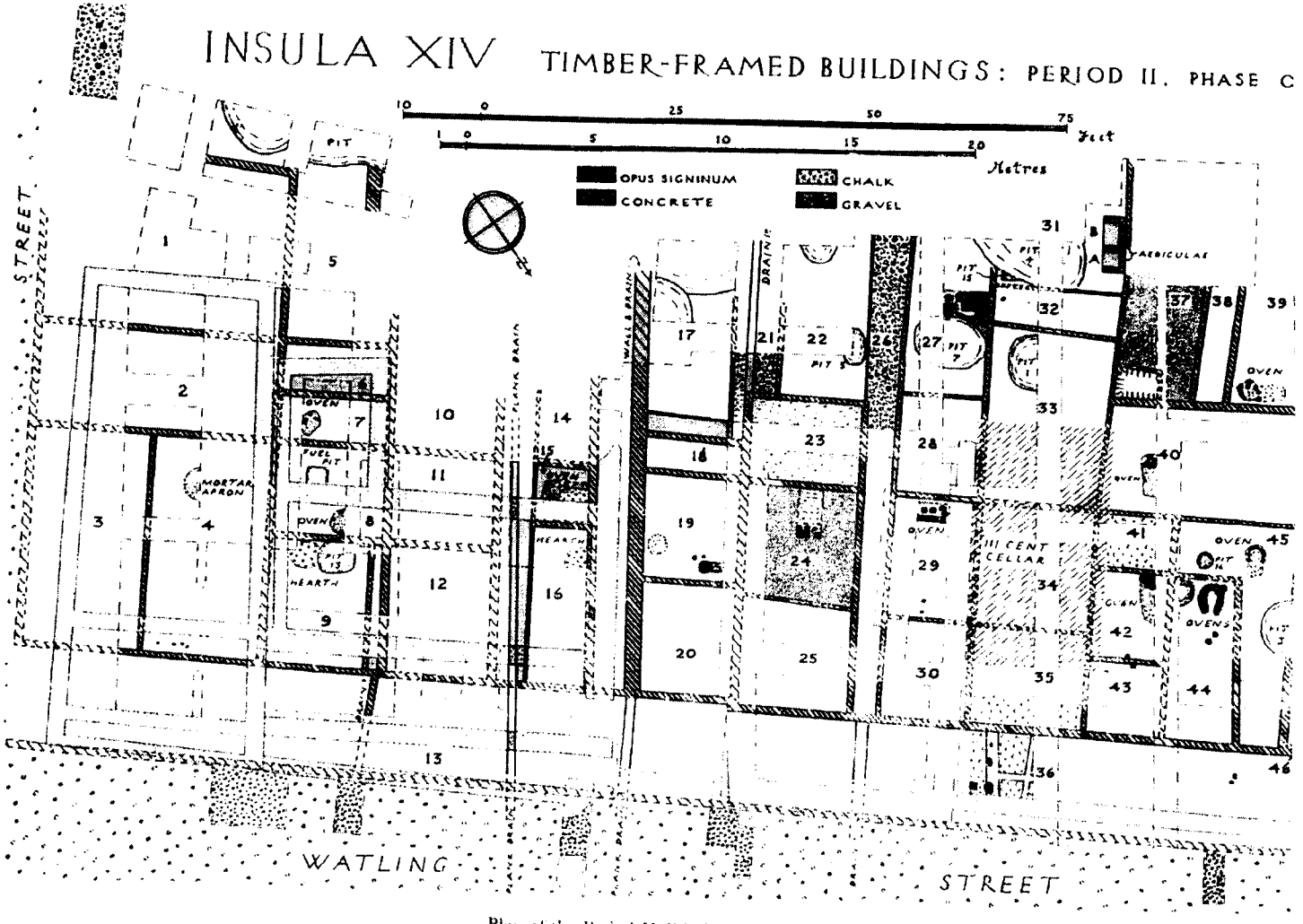
Plan of the Period II A buildings, *c.* A.D. 75–105.

Figure 3



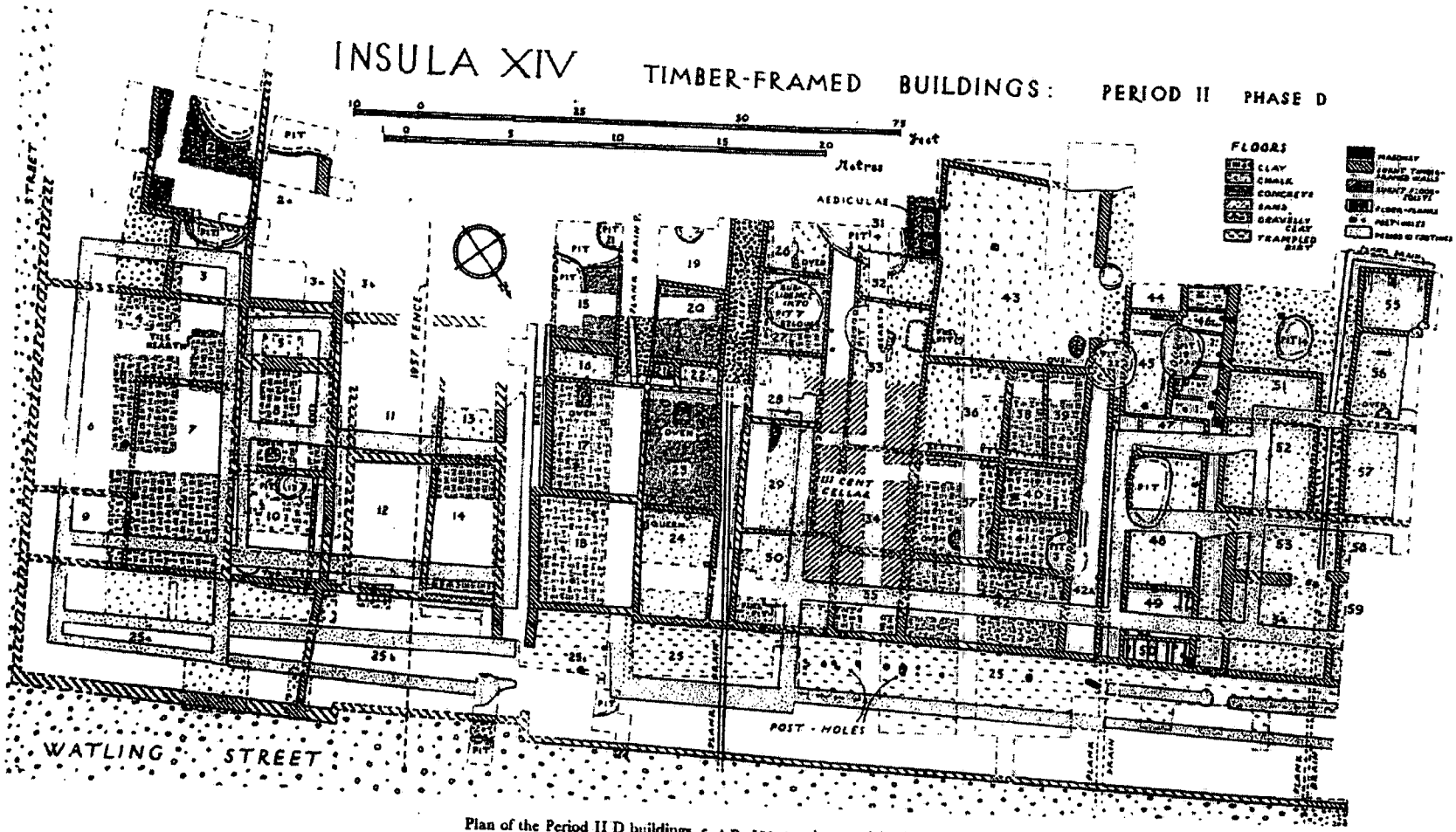
Plan of the Period II B buildings, *c.* A.D. 105–30.

Figure 4



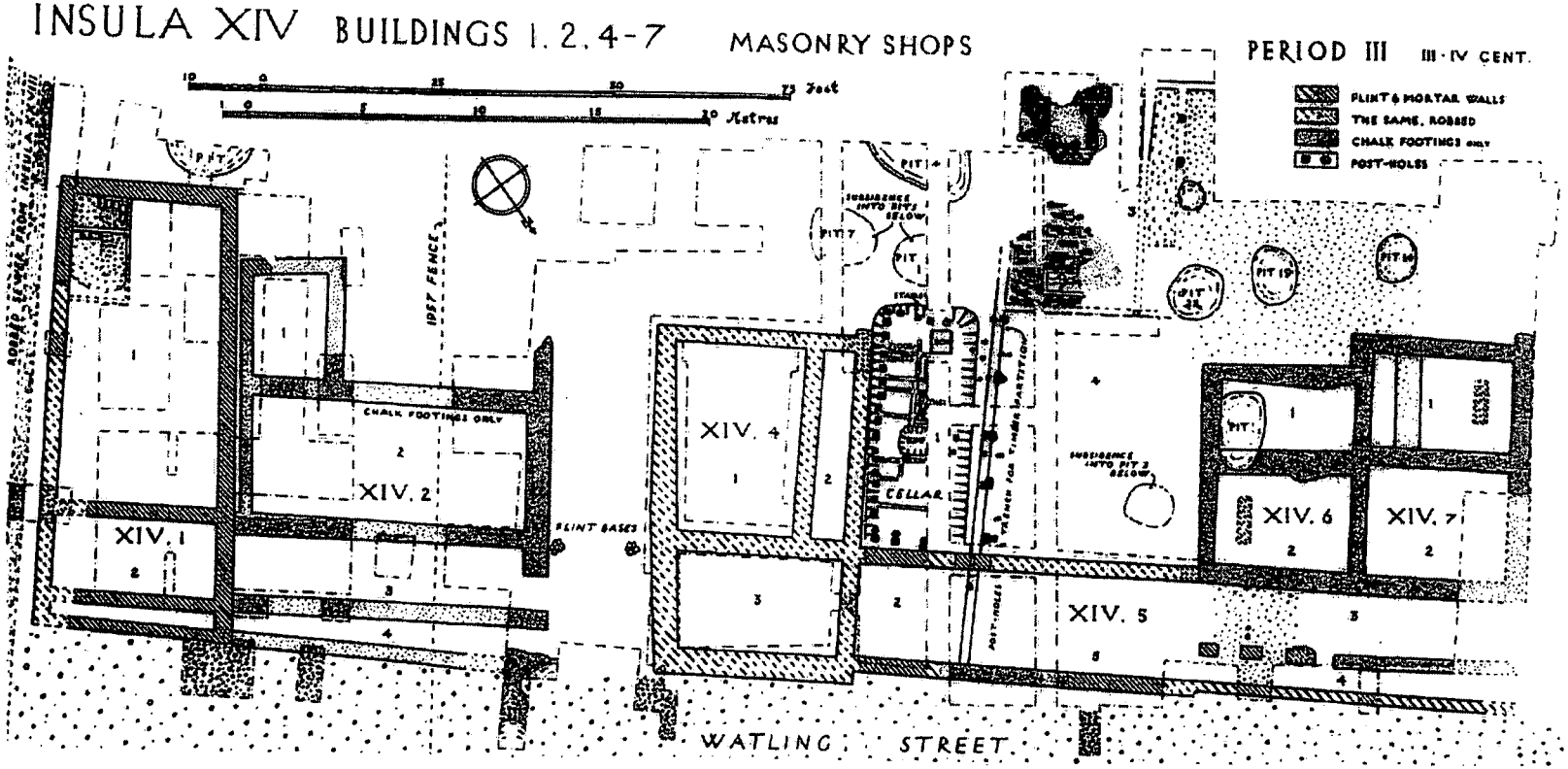
Plan of the Period II C buildings, A.D. 130–50.

Figure 5



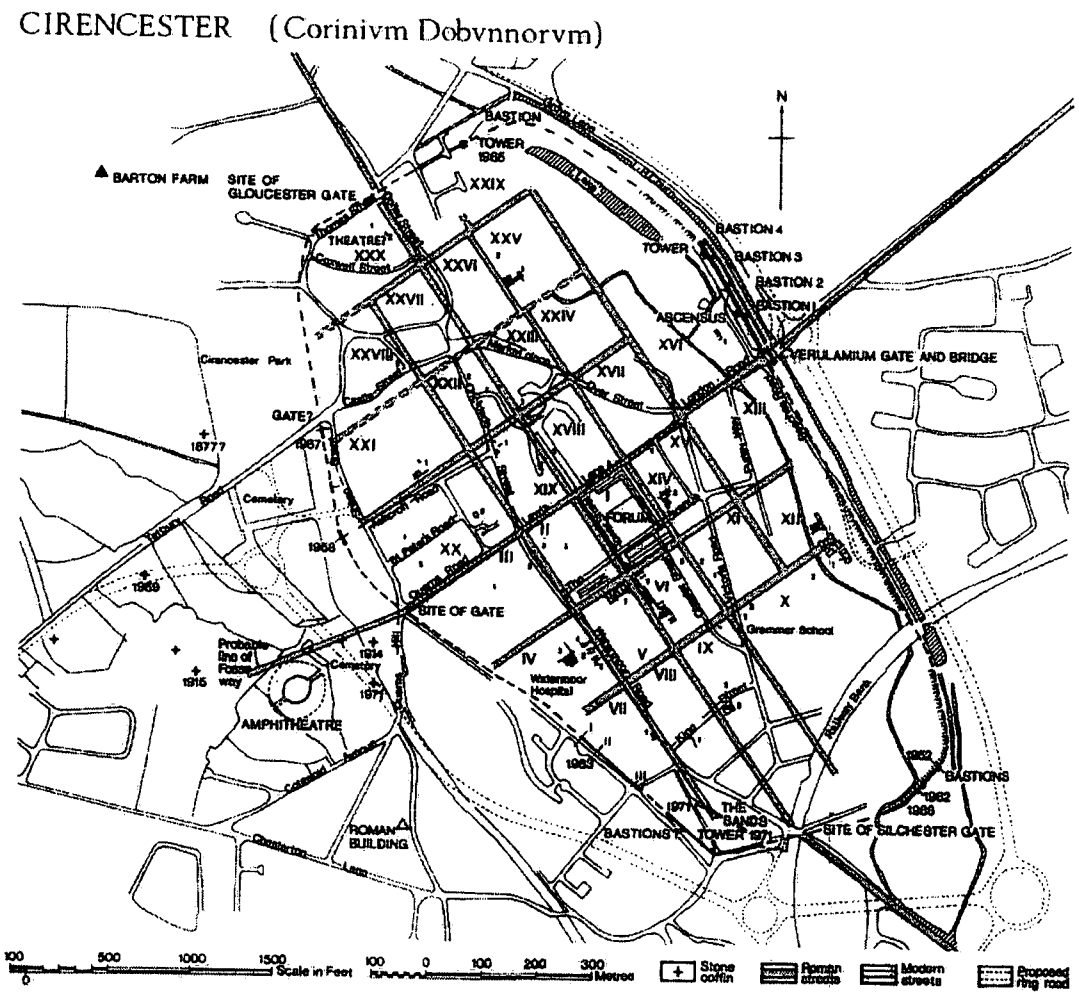
Plan of the Period II D buildings, *c.* A.D. 150–55, destroyed in the Antonine Fire.

Figure 6



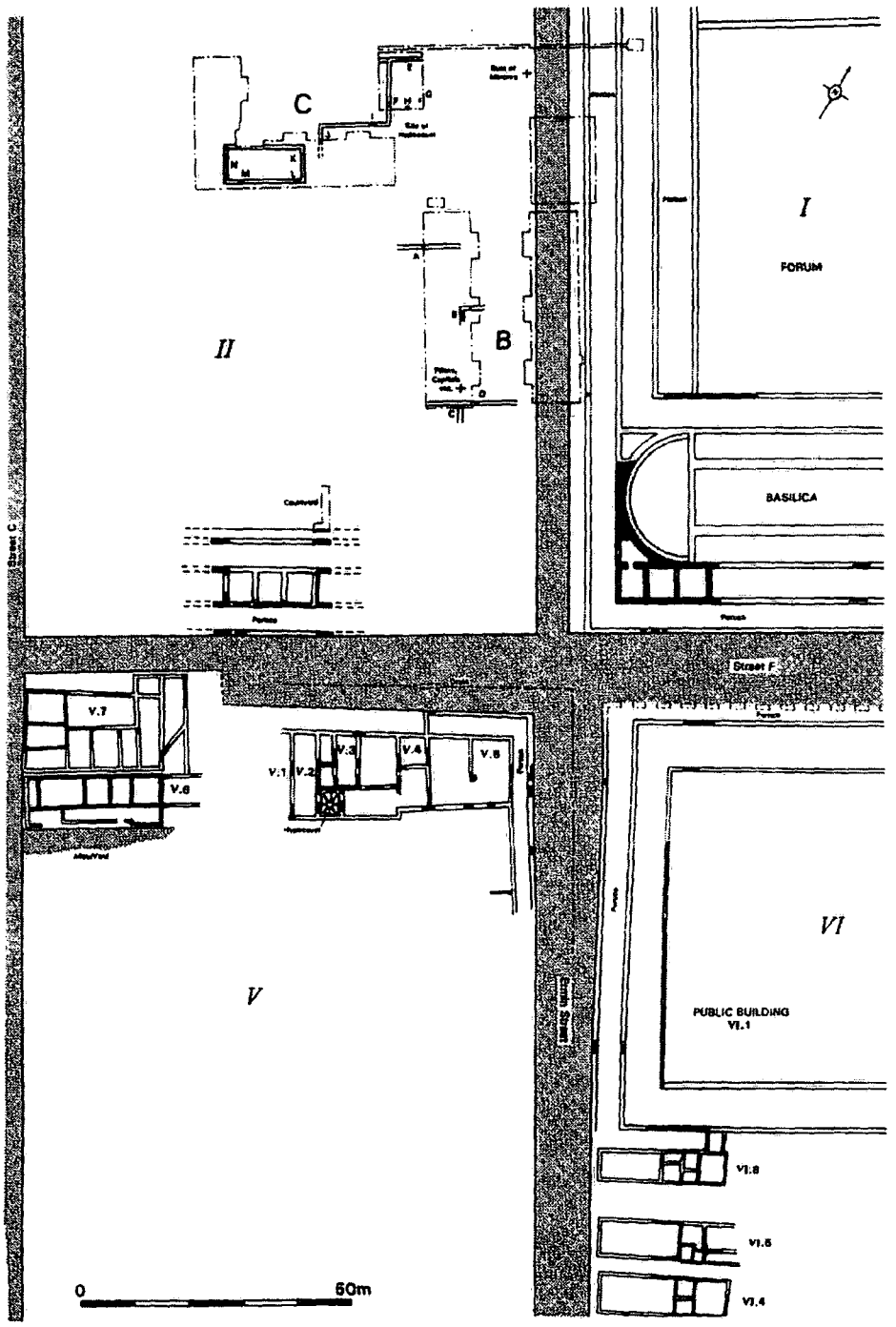
Plan of the Period III buildings.

Figure 7



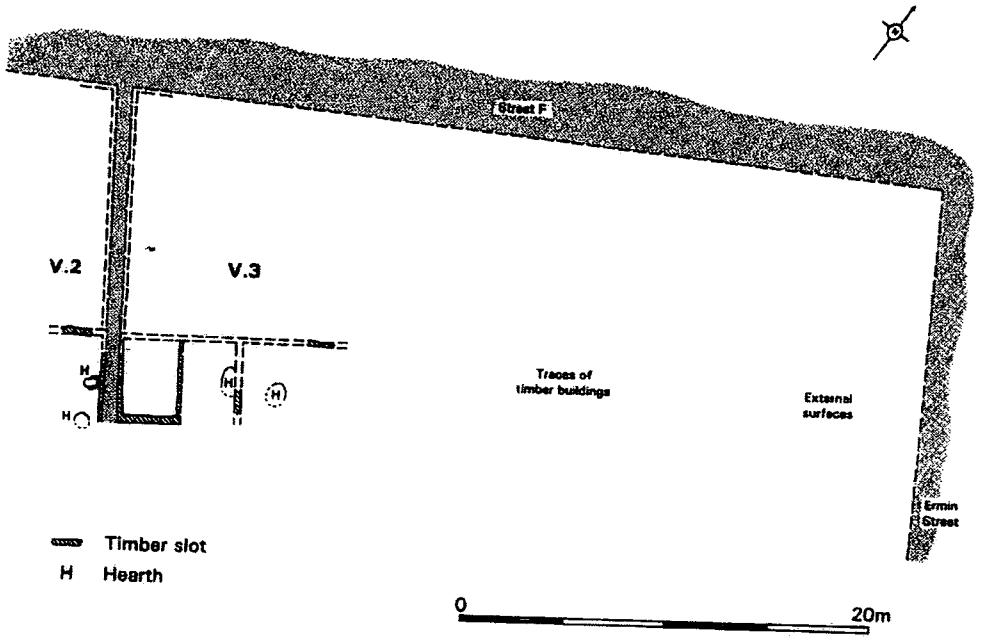
Plan of Cirencester (*after McWhirr*)

Figure 8

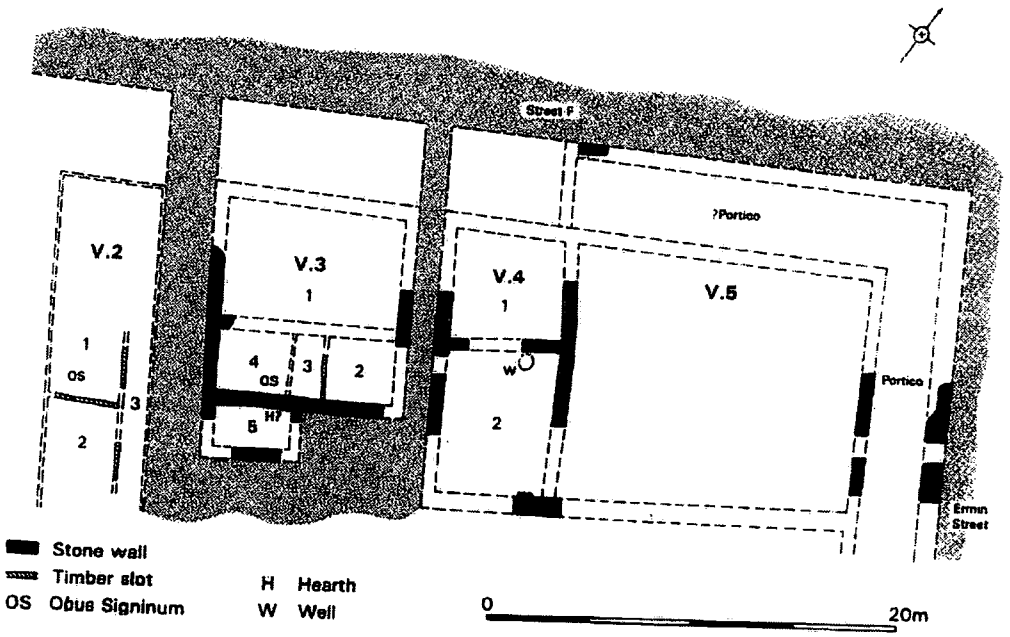


Plan of parts of *insulae* I, II, V, and VI

Period 1: c. 75-80 - Early Antonine

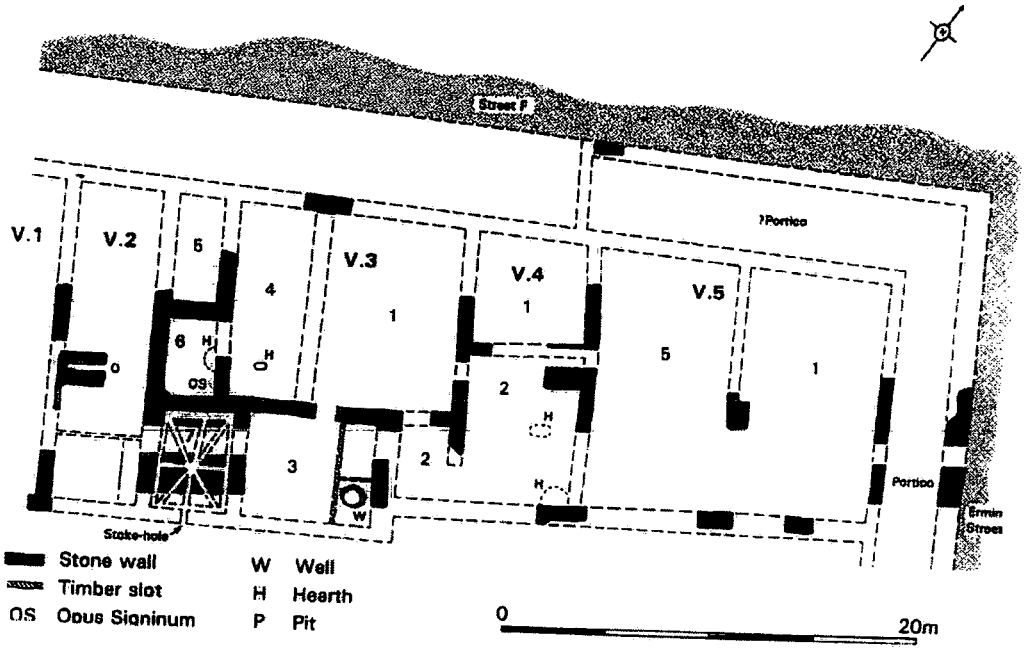


Period 2: Early Antonine - Early 3rd Century

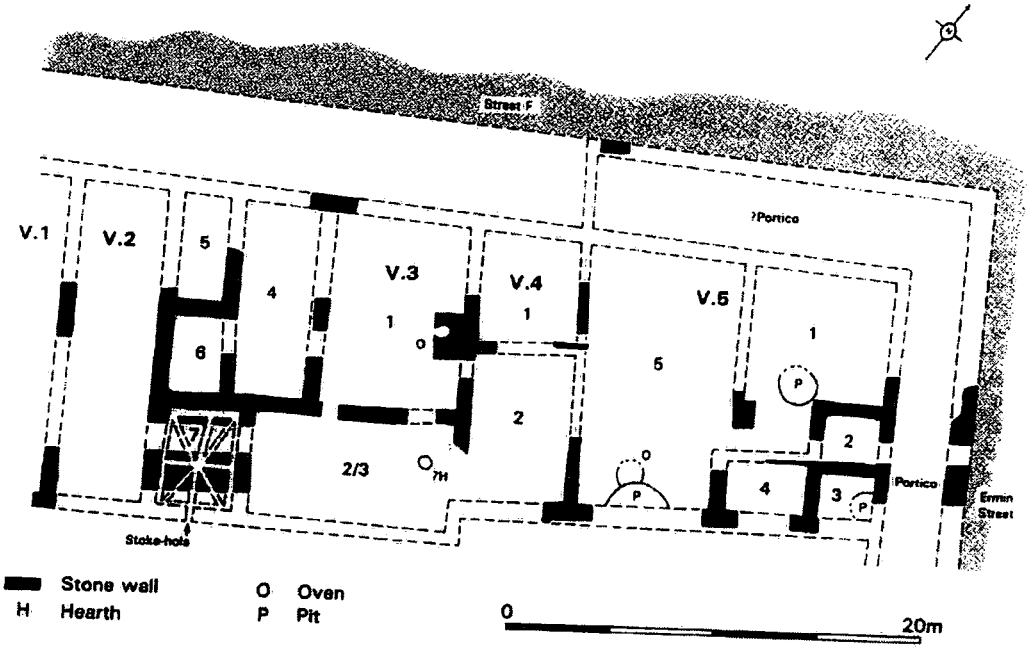


Development of the shops in *insula* V, Periods 1-2

Period 3: 3rd Century

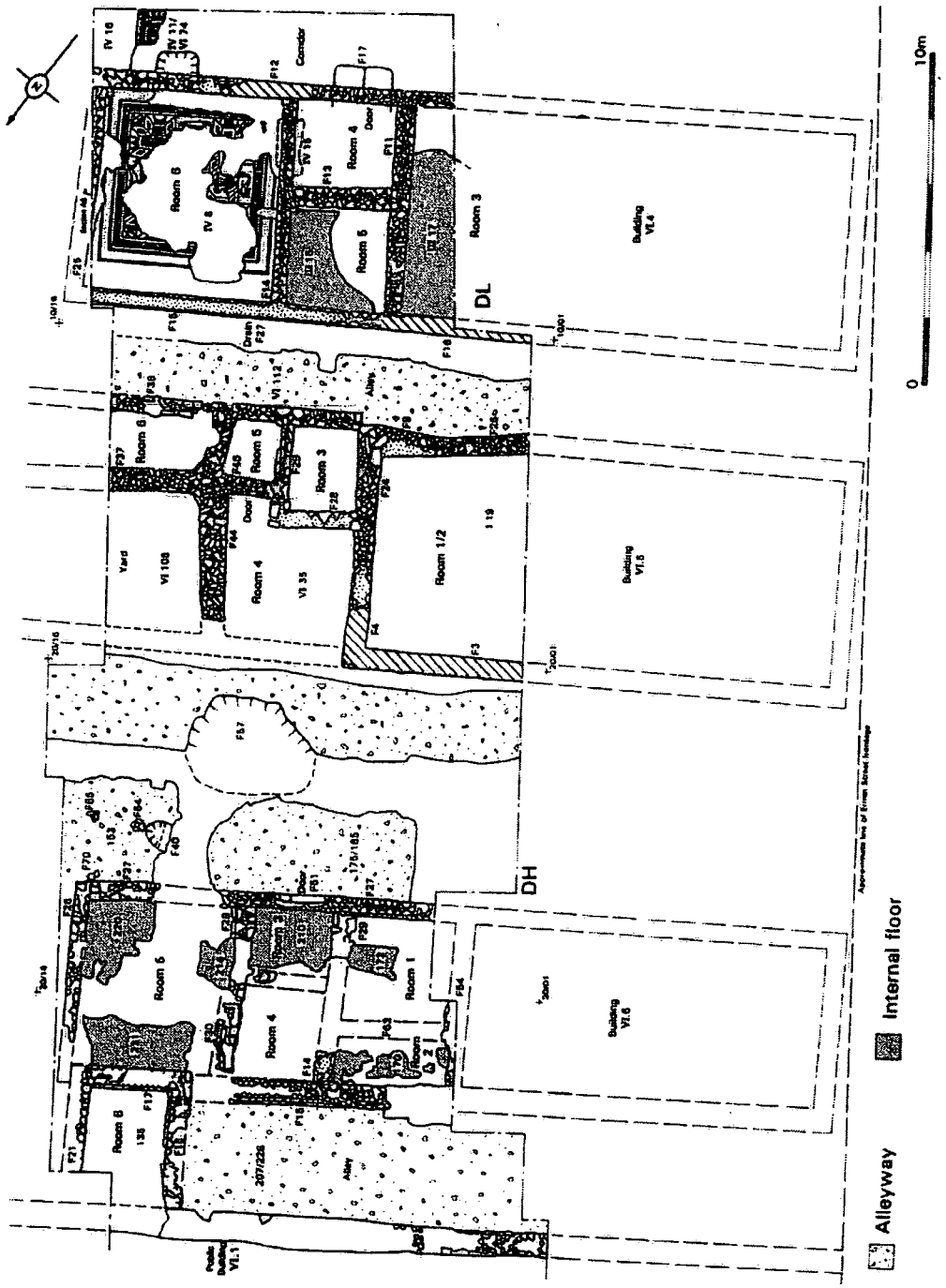


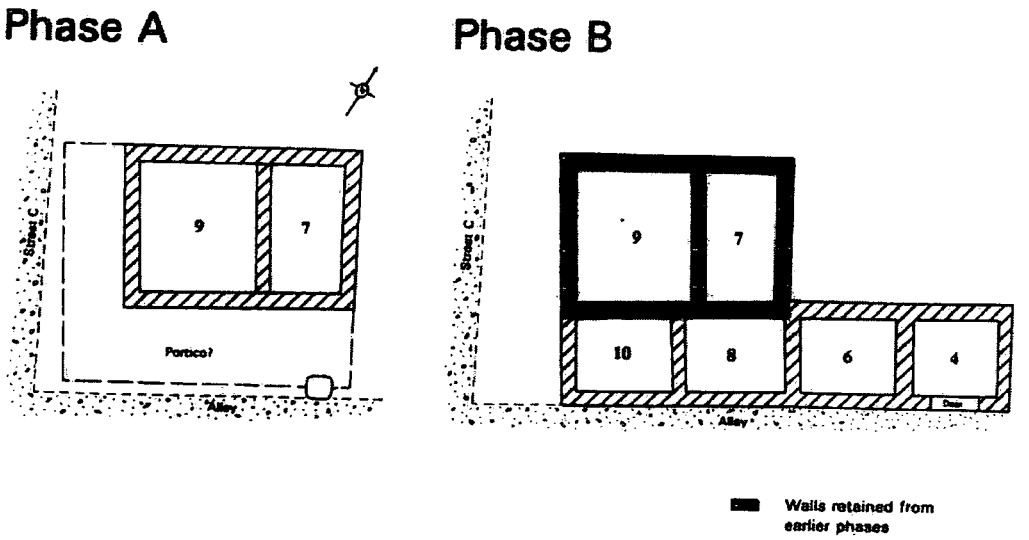
Period 3: 4th Century

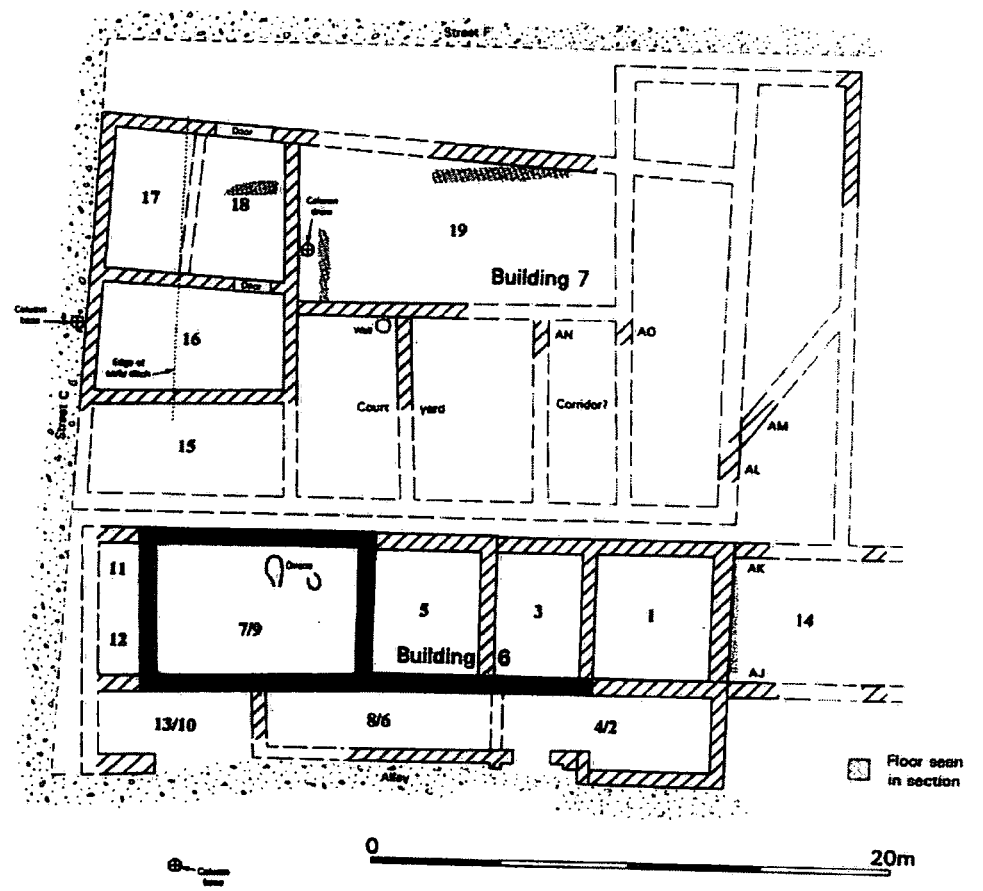


Development of the shops in *insula* V, Period 3

Figure 12


DL
DH
Room 6
Room 5
Room 3
Room 4
Room 1/2
Room 1
Room 2
Building Vl.4
Building Vl.5
Building Vl.6
Yard
Alley
Corridor
Door
Drain
10m
0
Internal floor
Alleyway





Development of buildings V.6 and V.7

Figure 14

WROXETER (Viroconivm)

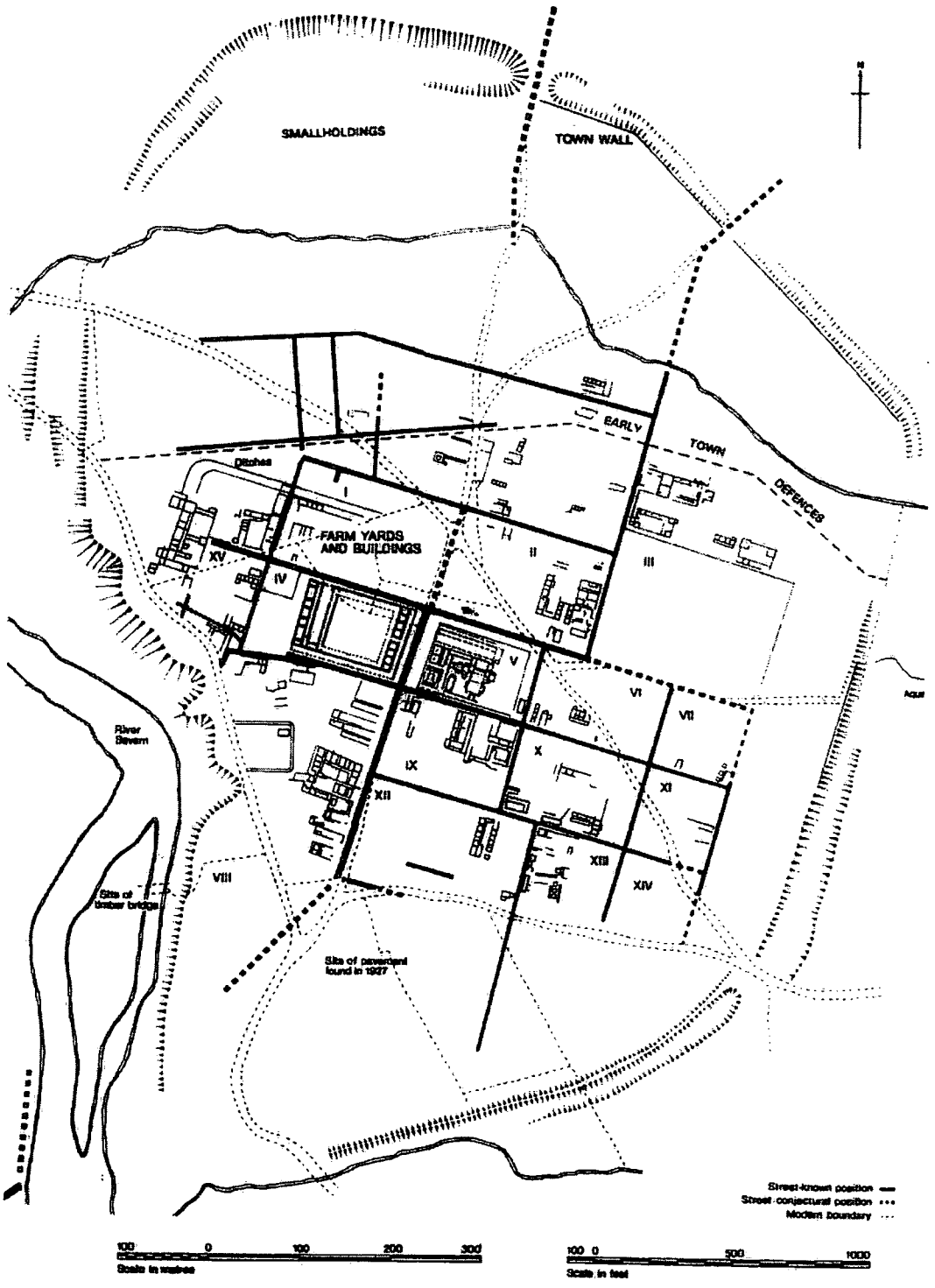
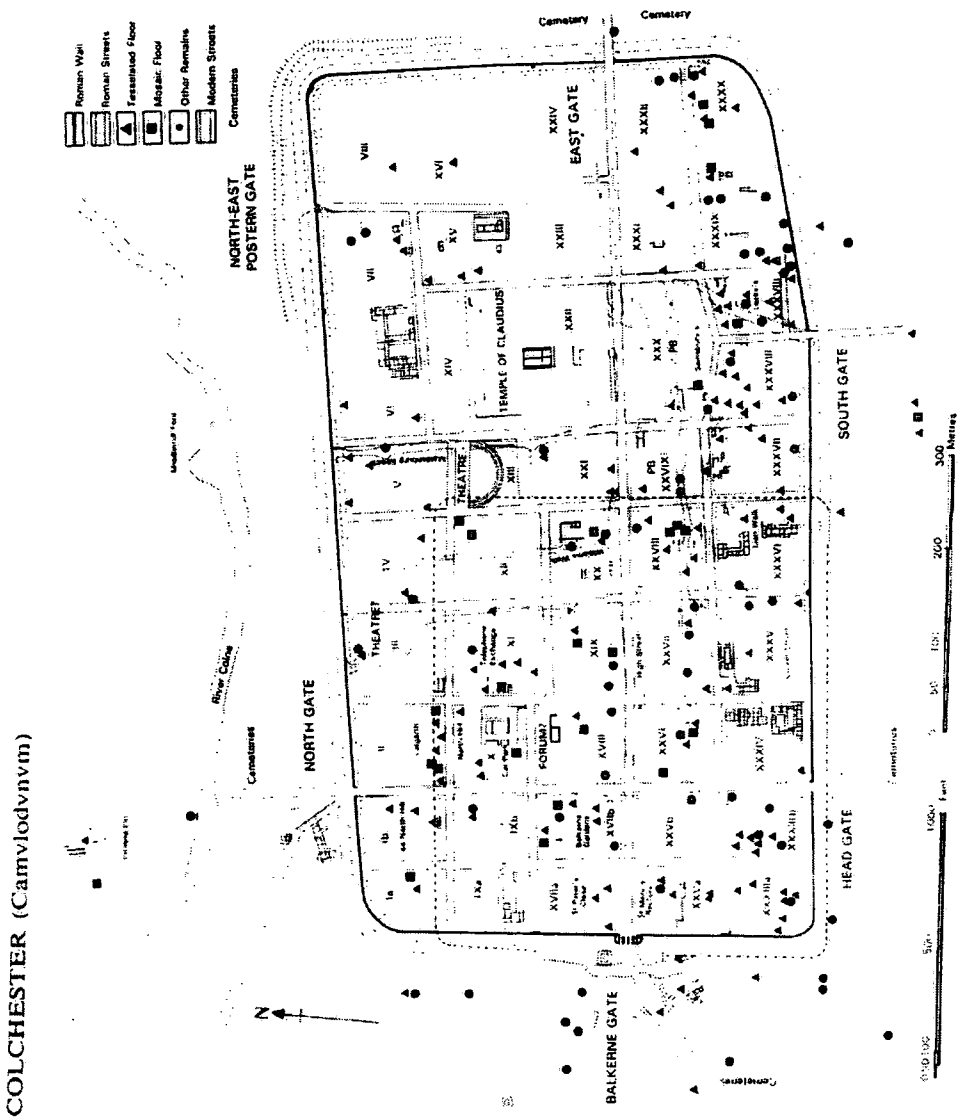
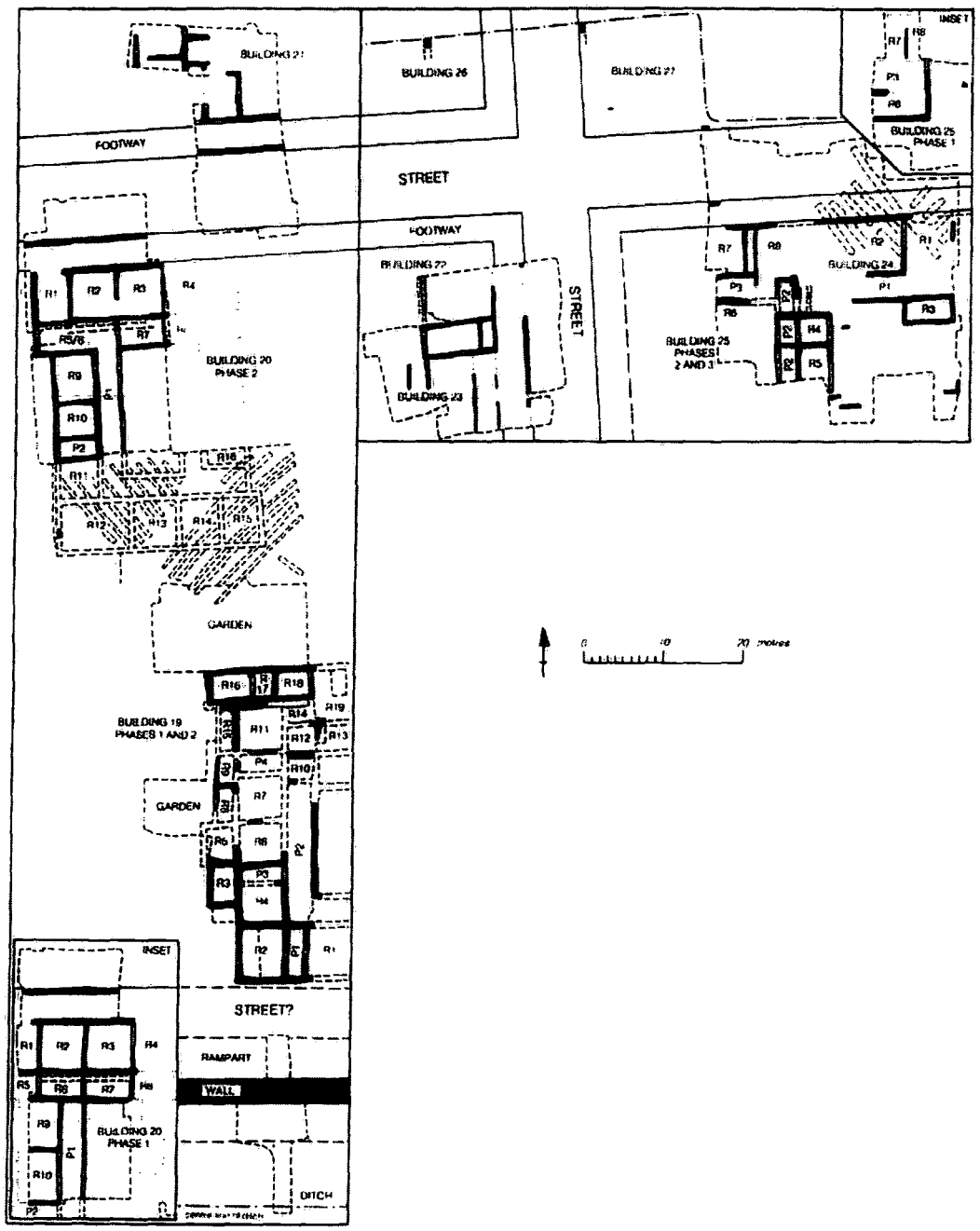


Figure 15

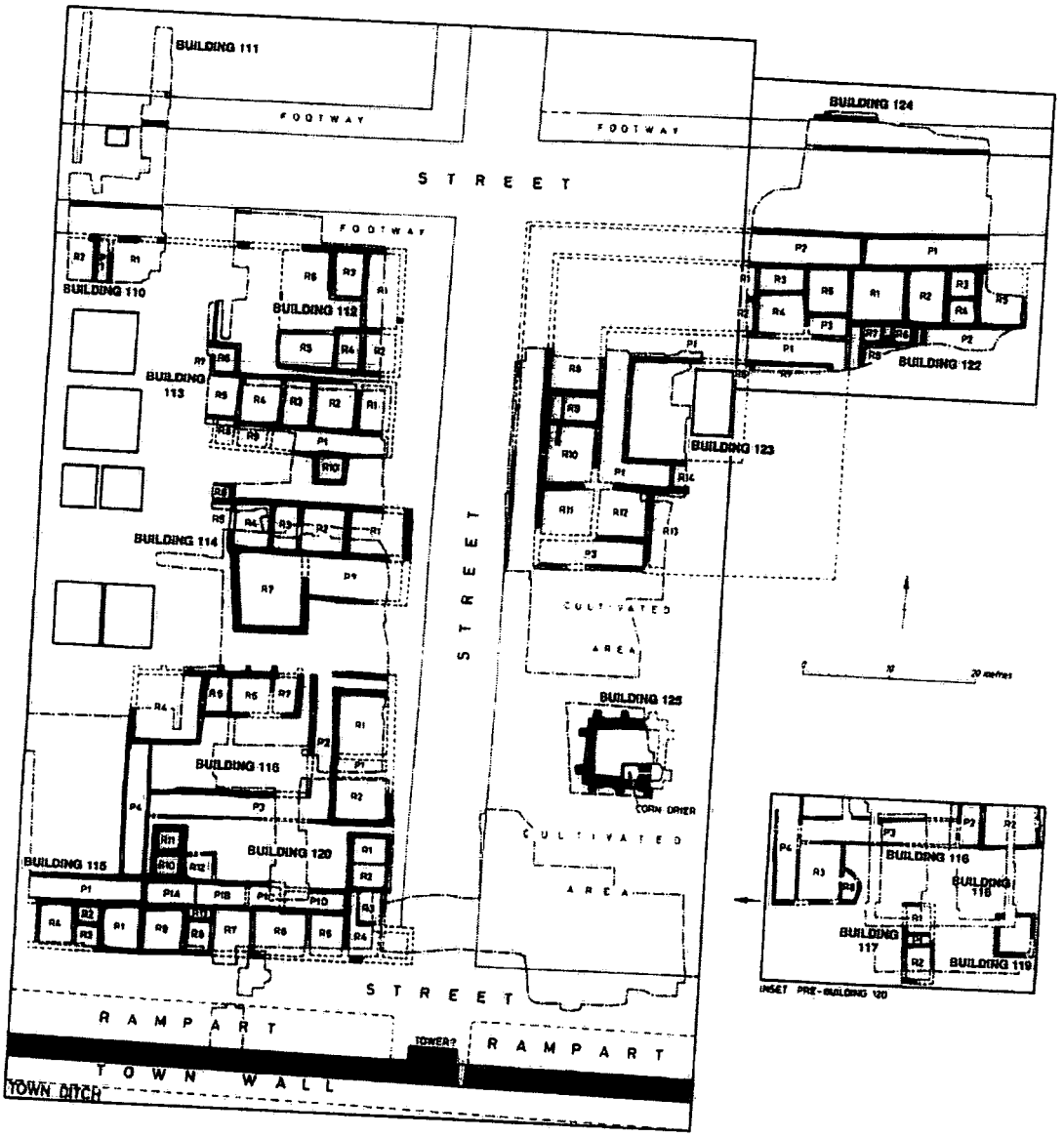


Plan of Colchester (*after Niblett and Crummy*)

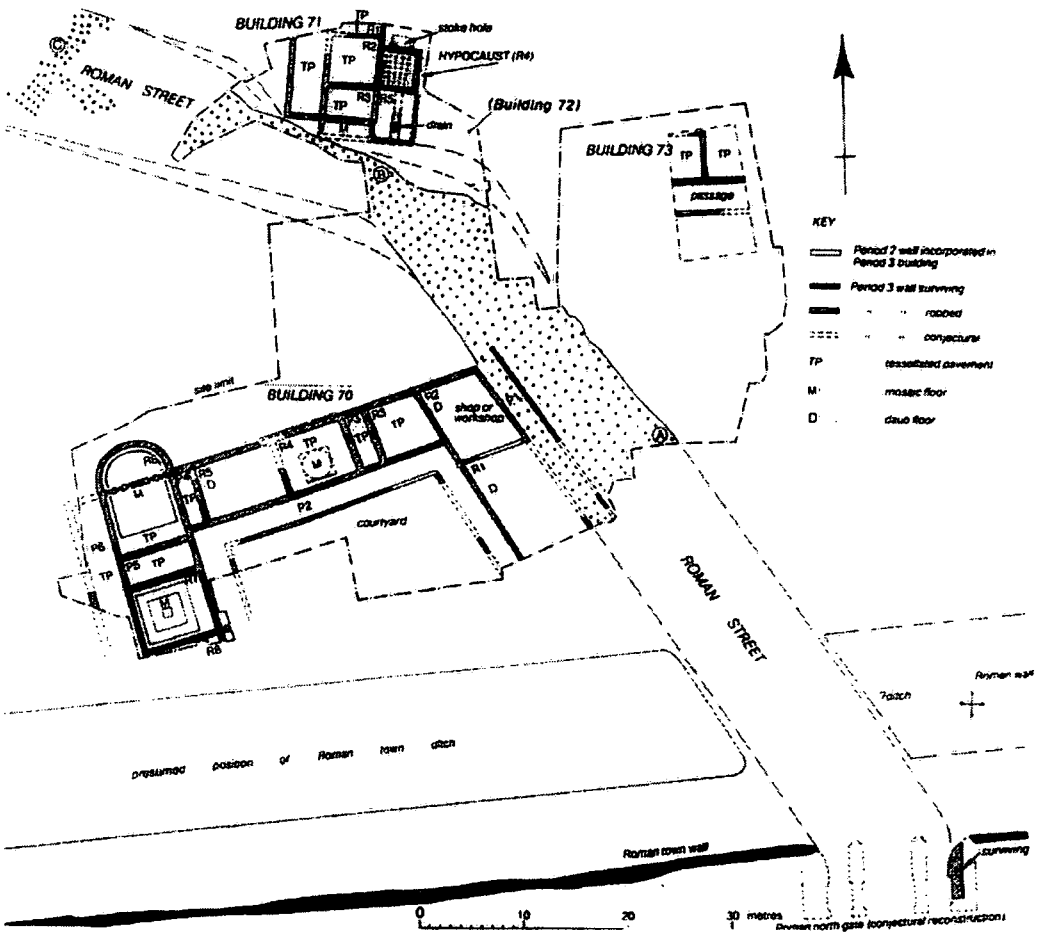


Town houses at Lion Walk, Colchester in the second to fifth century (*Crummy*)

Figure 17

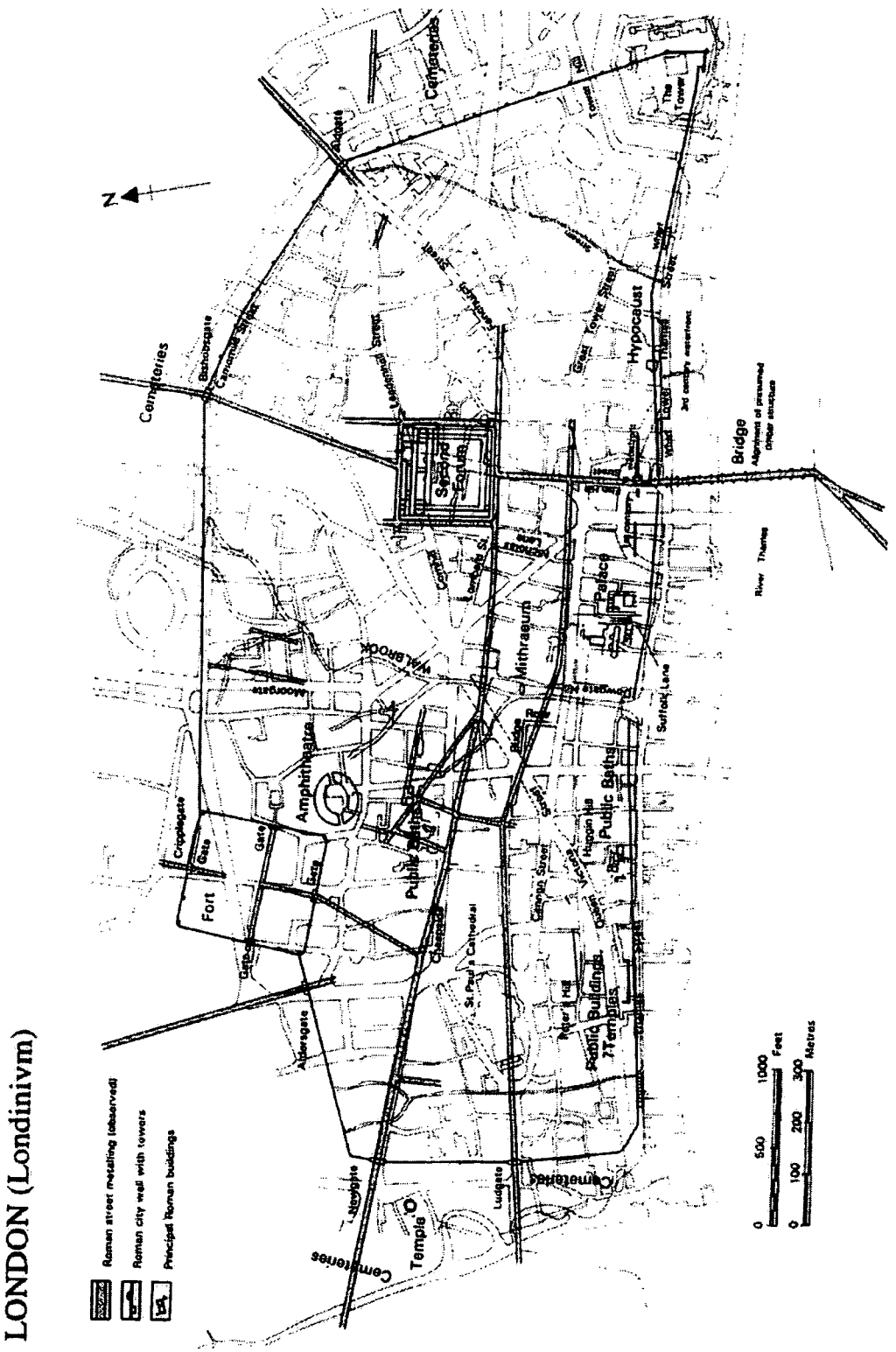


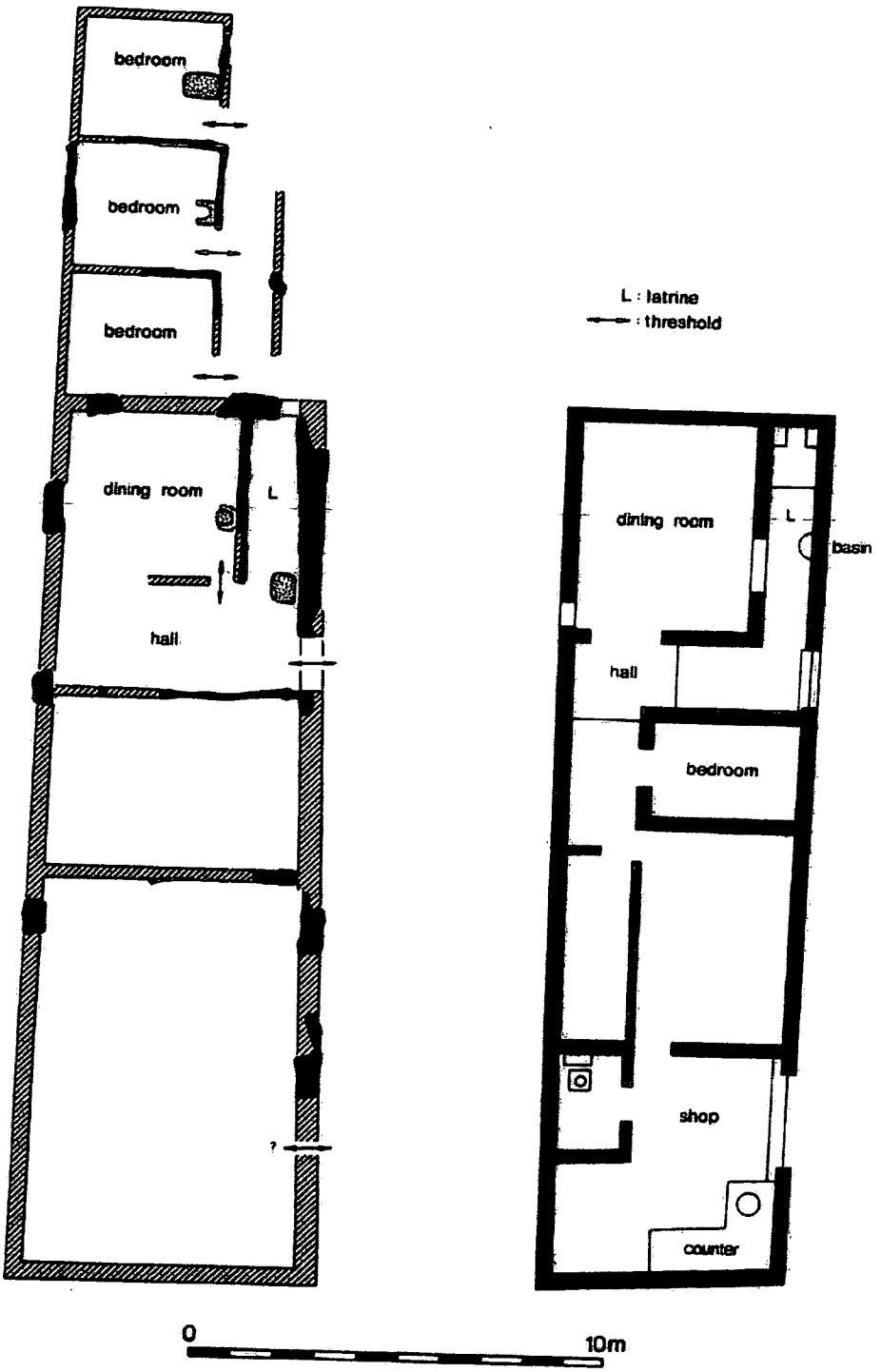
Outline plan of Culver Street c AD 150/200–275/325



Suburban houses outside the North Gate at Colchester, in Middleborough: second to fourth century (*Crummy*)

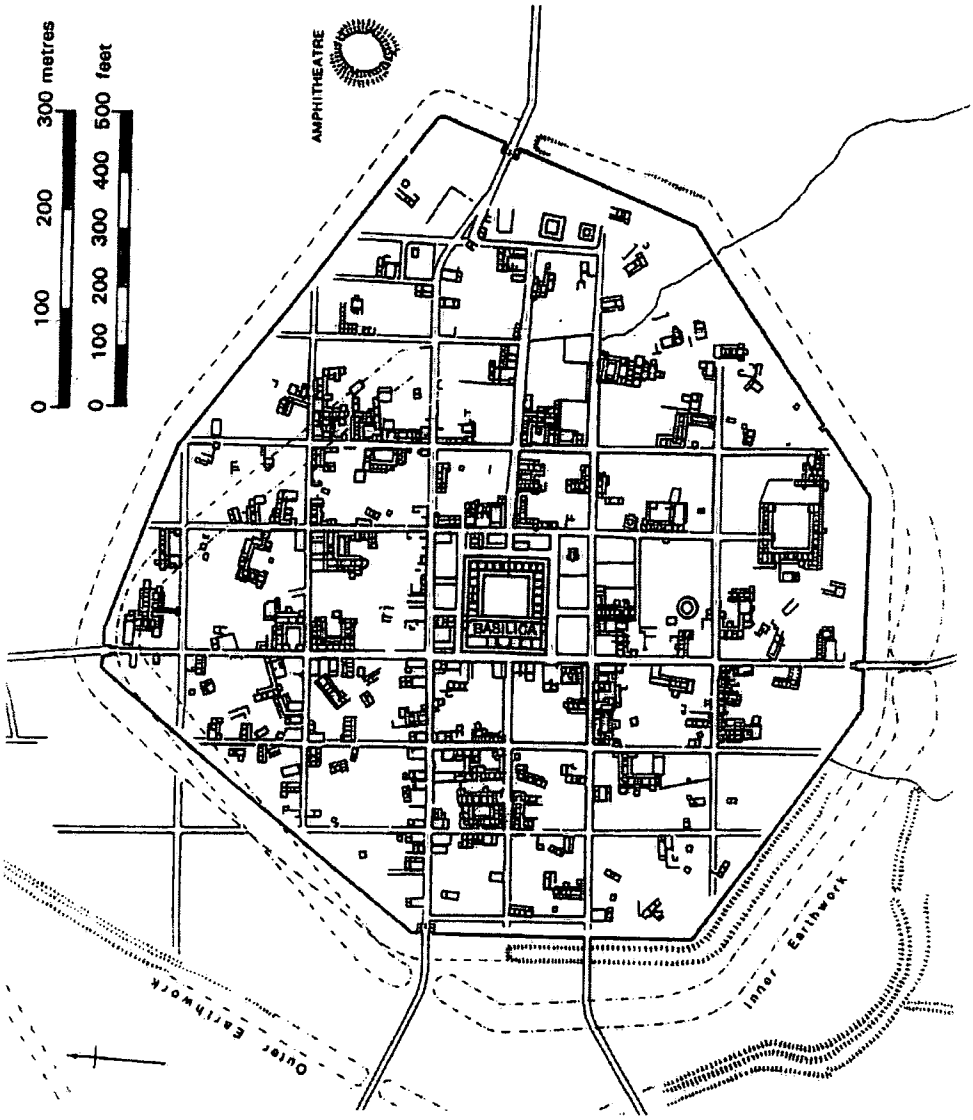
Figure 19


LONDON (Londinivm)
Roman street metalling (observed)
Roman city wall with towers
Principal Roman buildings
N
Cemeteries
Bishopsgate
Cannon Street
Leadenhall Street
Great Tower Street
Hypocaust
Thames
Bridge
Alignment of presumed timber structure
River Thames
Basilica
Forum
Mithraeum
Palace
Walbrook
Aldersgate
Cripplegate
Gate
Fort
Amphitheatre
Public Baths
Public Buildings
Temples
St. Paul's Cathedral
Peter Hill
Queen Street
Sutton Lane
Aldgate
Ludgate
Newgate
Temple
0 500 1000 Feet
0 100 200 300 Metres



Plan of Building K at Newgate Street (left) indicating suggested functions for some of the rooms, compared with the plan of a building from Herculaneum (right; this plan has been reversed in order to illustrate better the points of similarity). Both buildings were placed on street corners and would have been approached from bottom right (as drawn). Scale: 1:200.

Figure 21



Plan of Silchester (*after Hope, Boon and Fulford*)

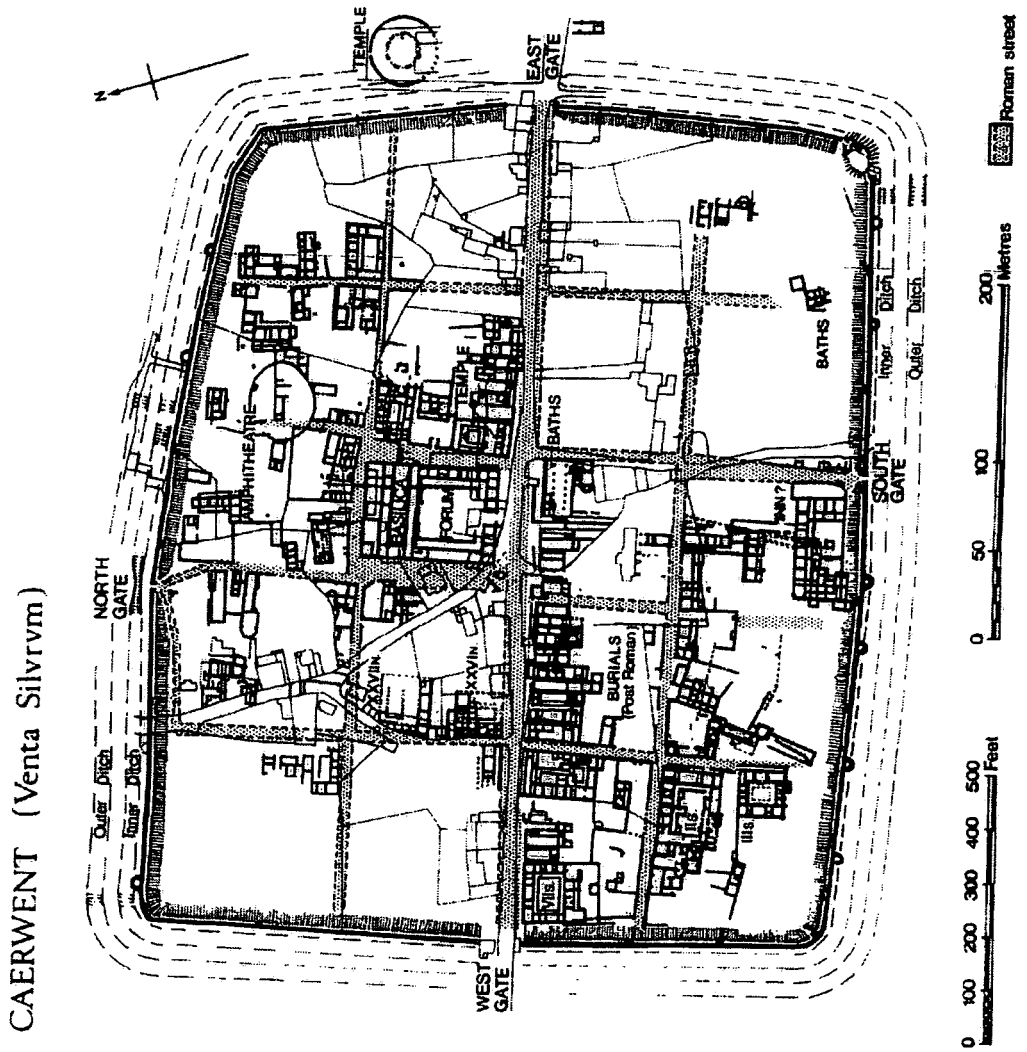
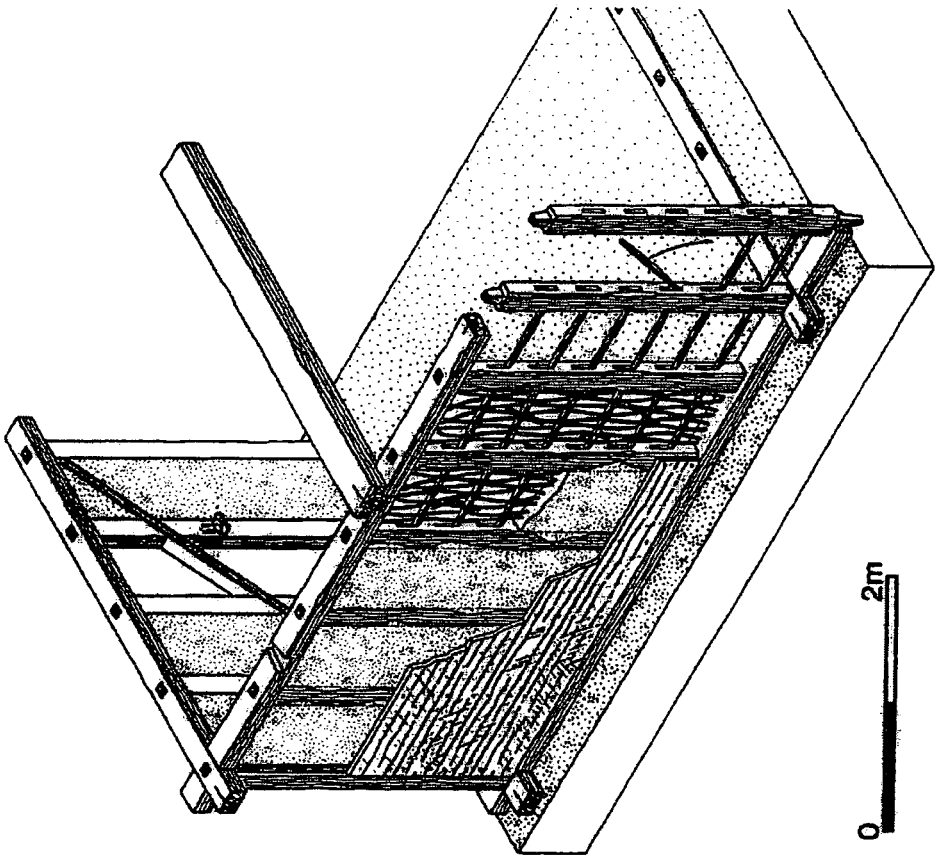

CAERWENT (Venta Silvrvm)
N
TEMPLE
EAST GATE
NORTH GATE
Outer Ditch
Inner Ditch
AMPHITHEATRE
FORUM
TEMPLE
BATHS
BATHS
BURIALS (Post Roman)
SOUTH GATE
WEST GATE
Inner Ditch
Outer Ditch
Roman street
0 50 100 200 Metres
0 100 200 300 400 500 Feet

Figure 23



Reconstruction drawing showing how the Cannon Street building timbers can be assembled to form a building up to the roof height

Figure 24

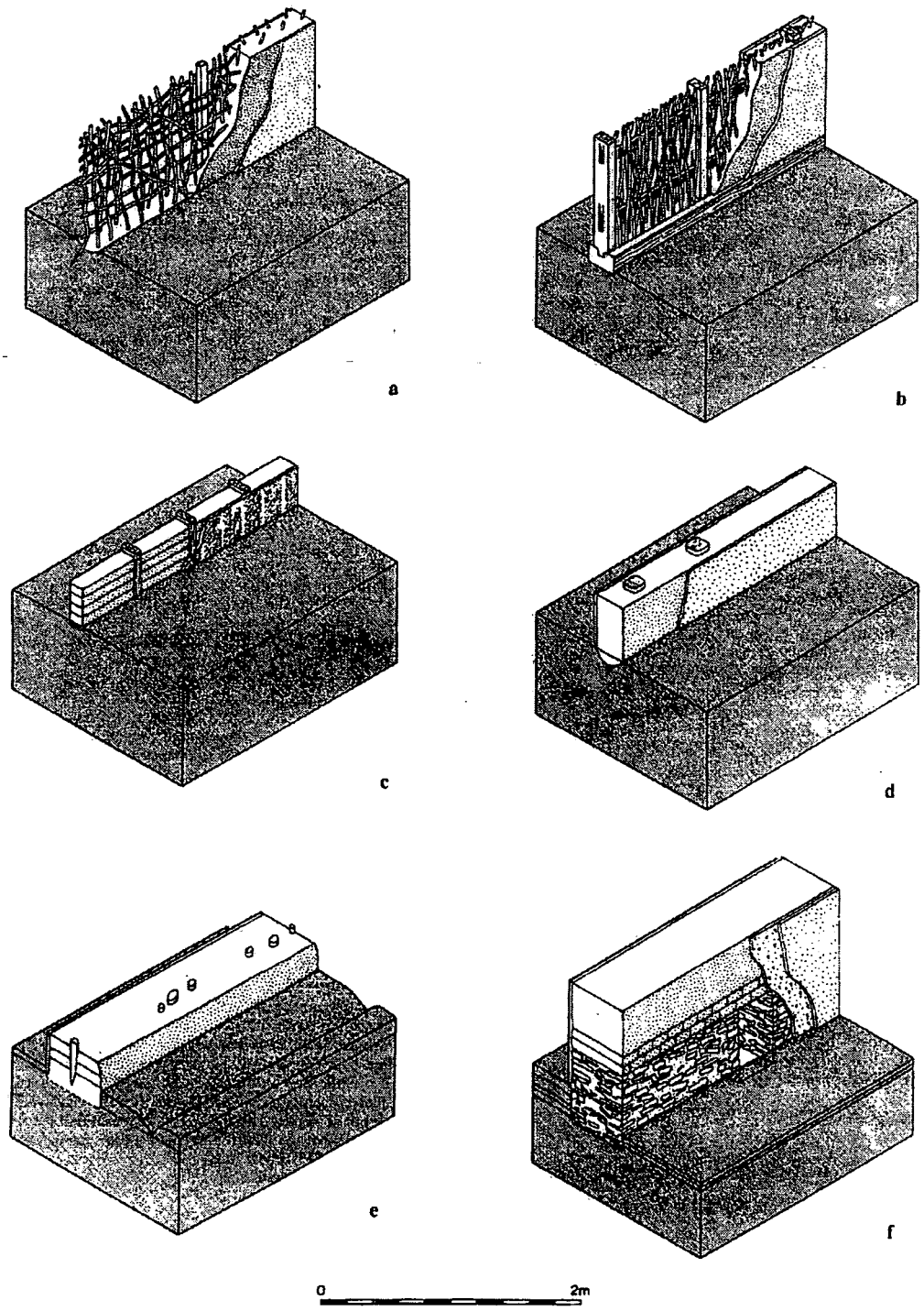


Figure 25

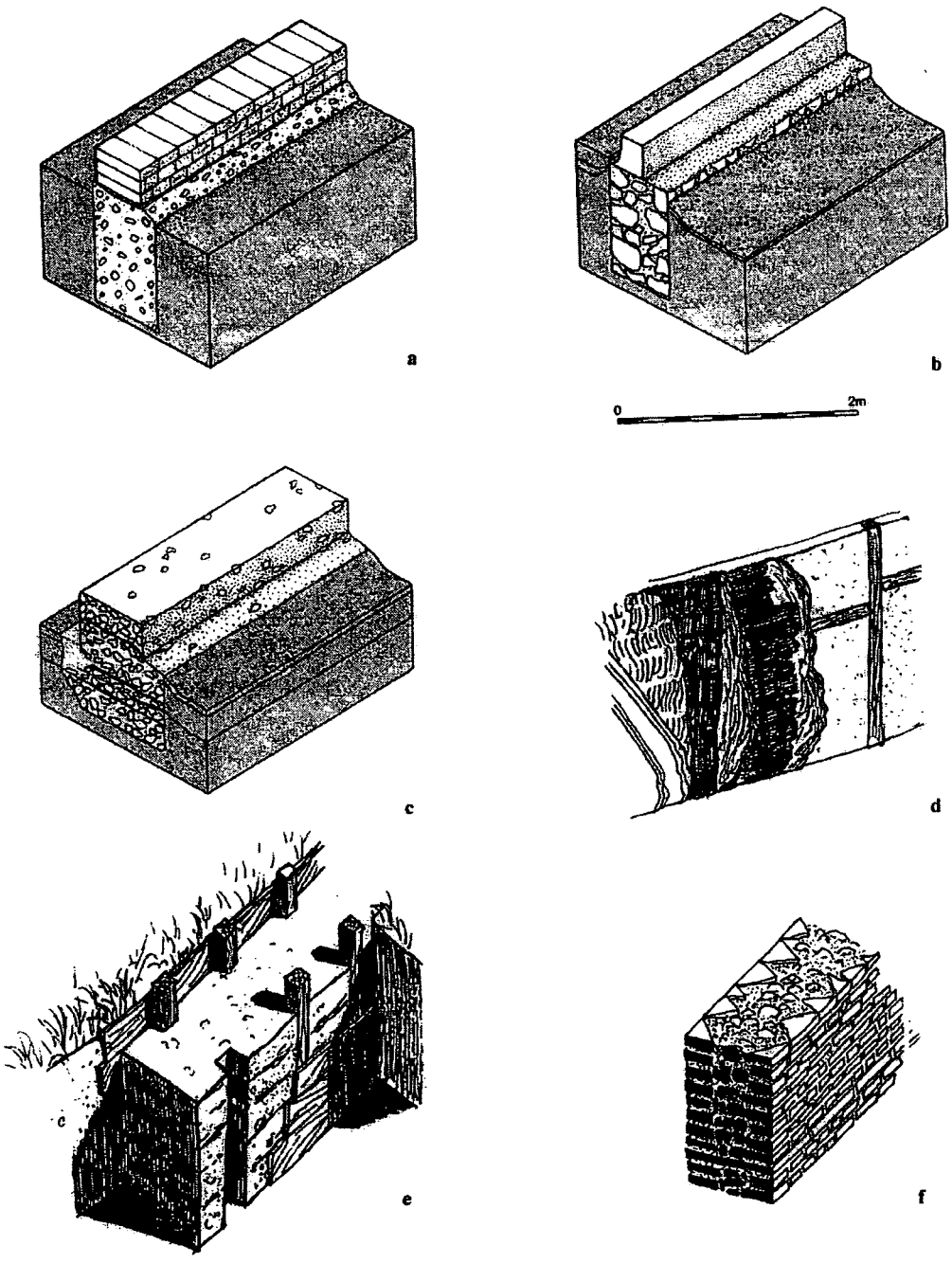


Figure 26

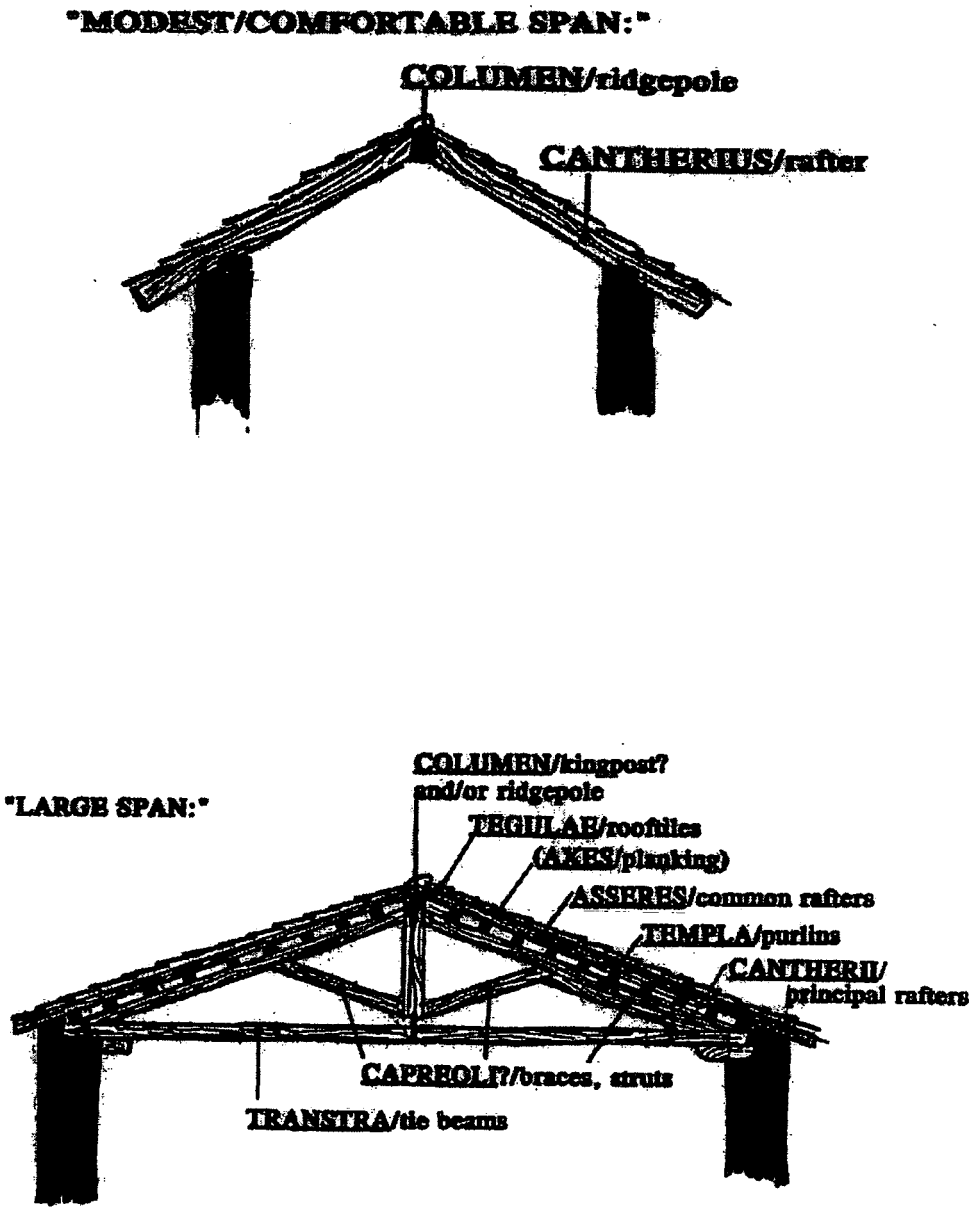
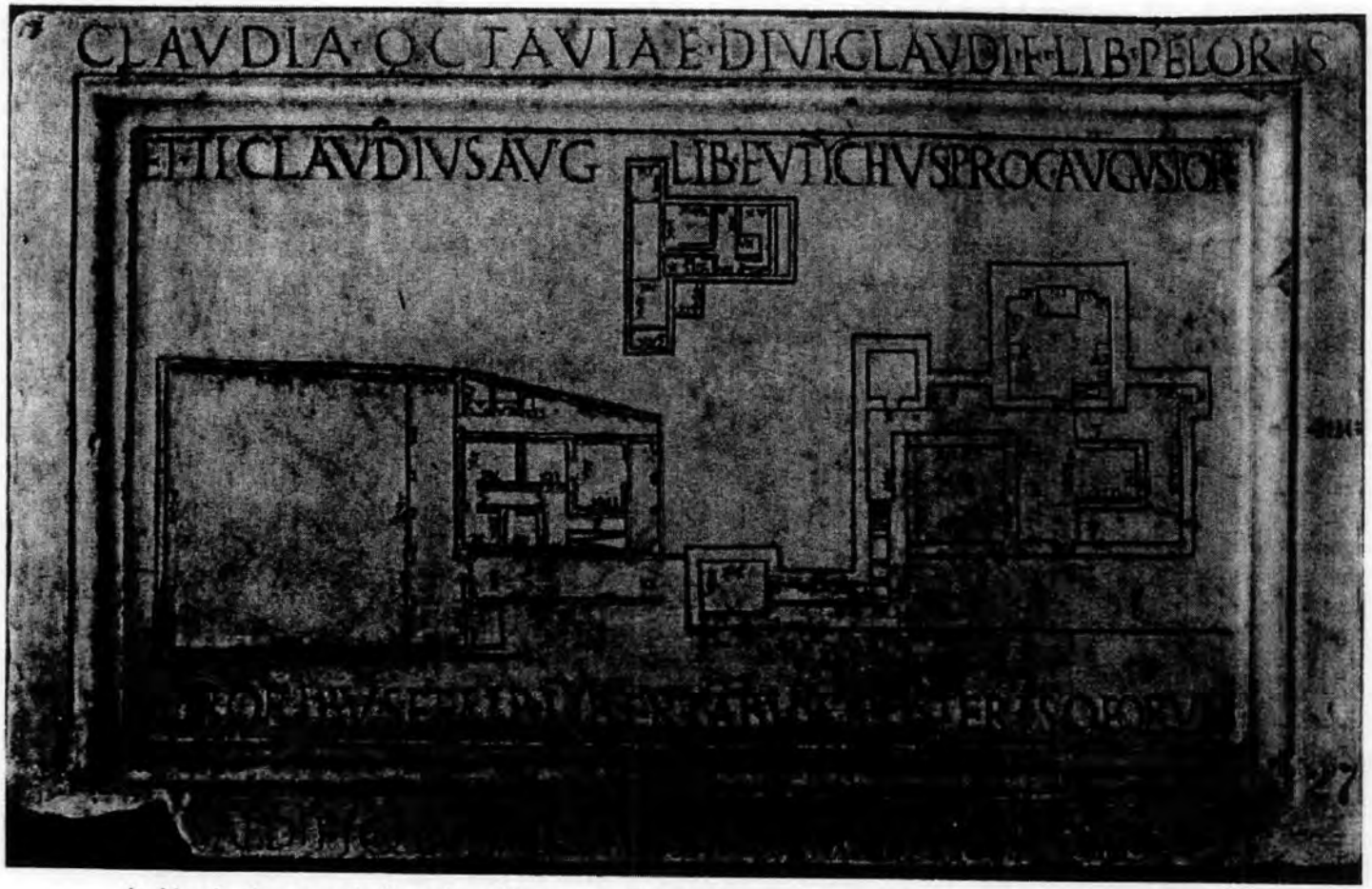

"MODEST/COMFORTABLE SPAN:"
COLUMEN/ridgepole
CANTHERIUS/rafter
"LARGE SPAN:"
COLUMEN/kingpost?
and/or ridgepole
TEGULAE/rooftiles
(AXES/planking)
ASSERES/common rafters
TEMPLA/purlins
CANTHERII/
principal rafters
CAPREOLI?/braces, struts
TRANSTRA/tie beams

Figure 27

Fragments of the Marble Plan of Rome



Architect's plan, now in Perugia, of funerary buildings (Photo: G Lucarini, courtesy Archaeological Superintendency of Umbria)

Figure 28

Figure 29

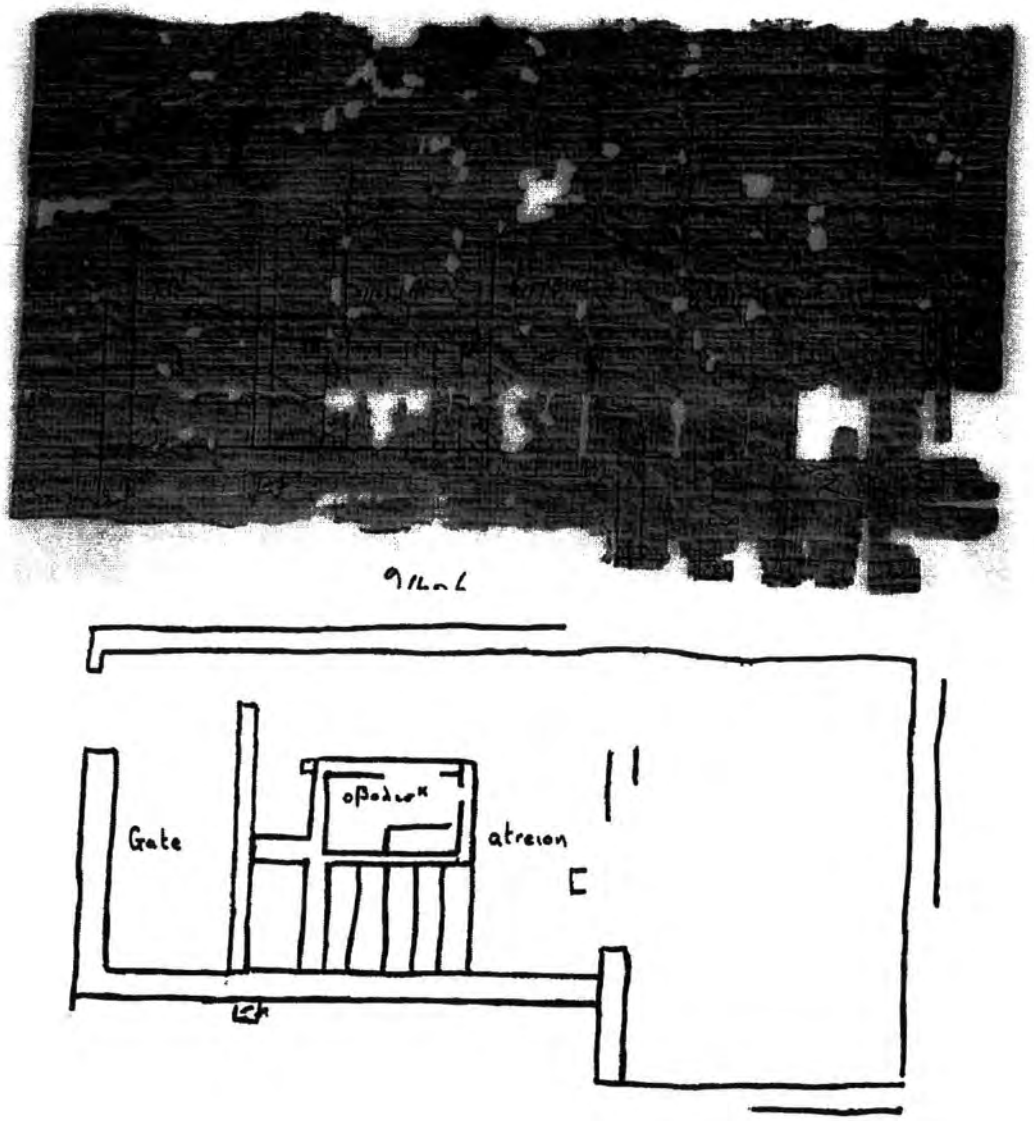
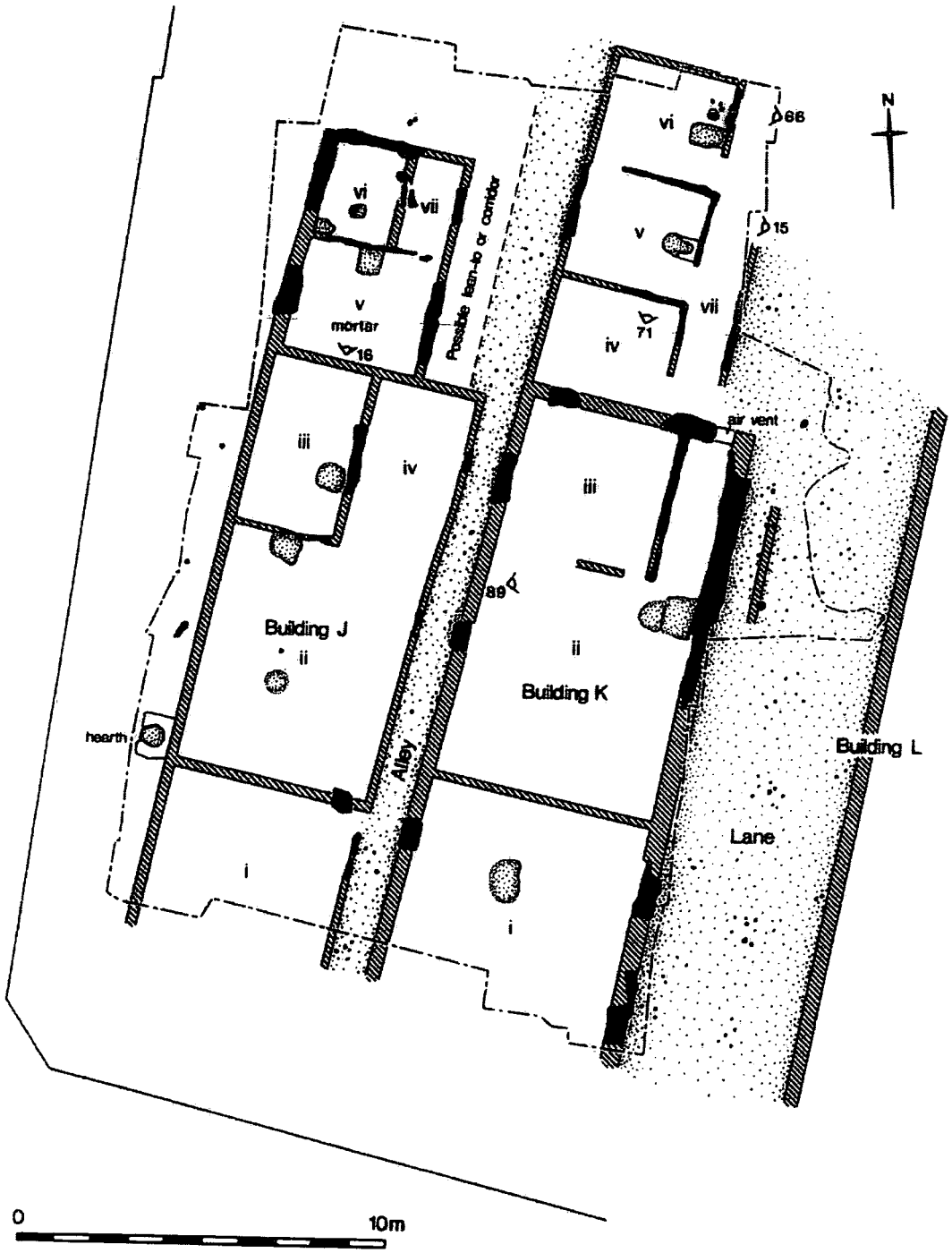
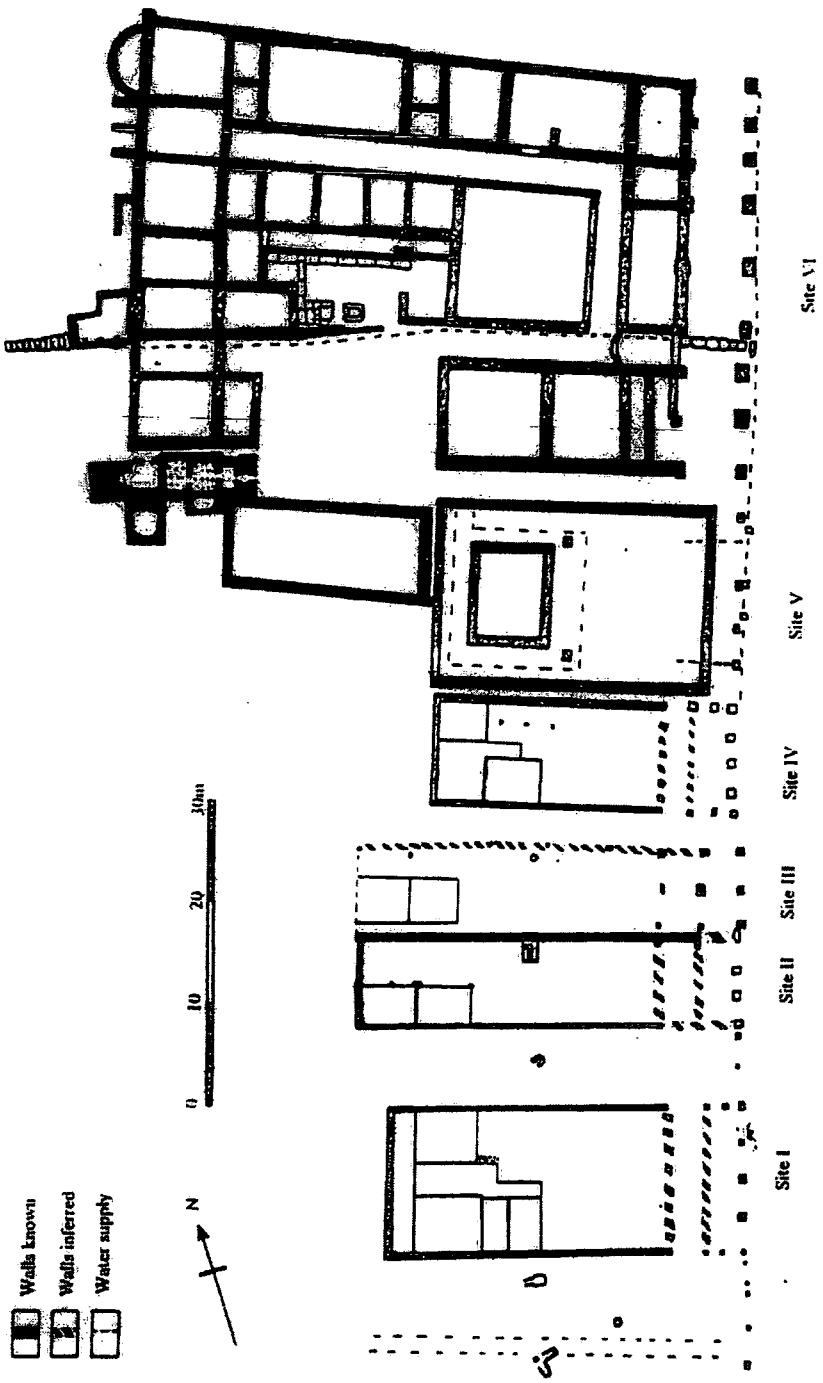


Figure 30

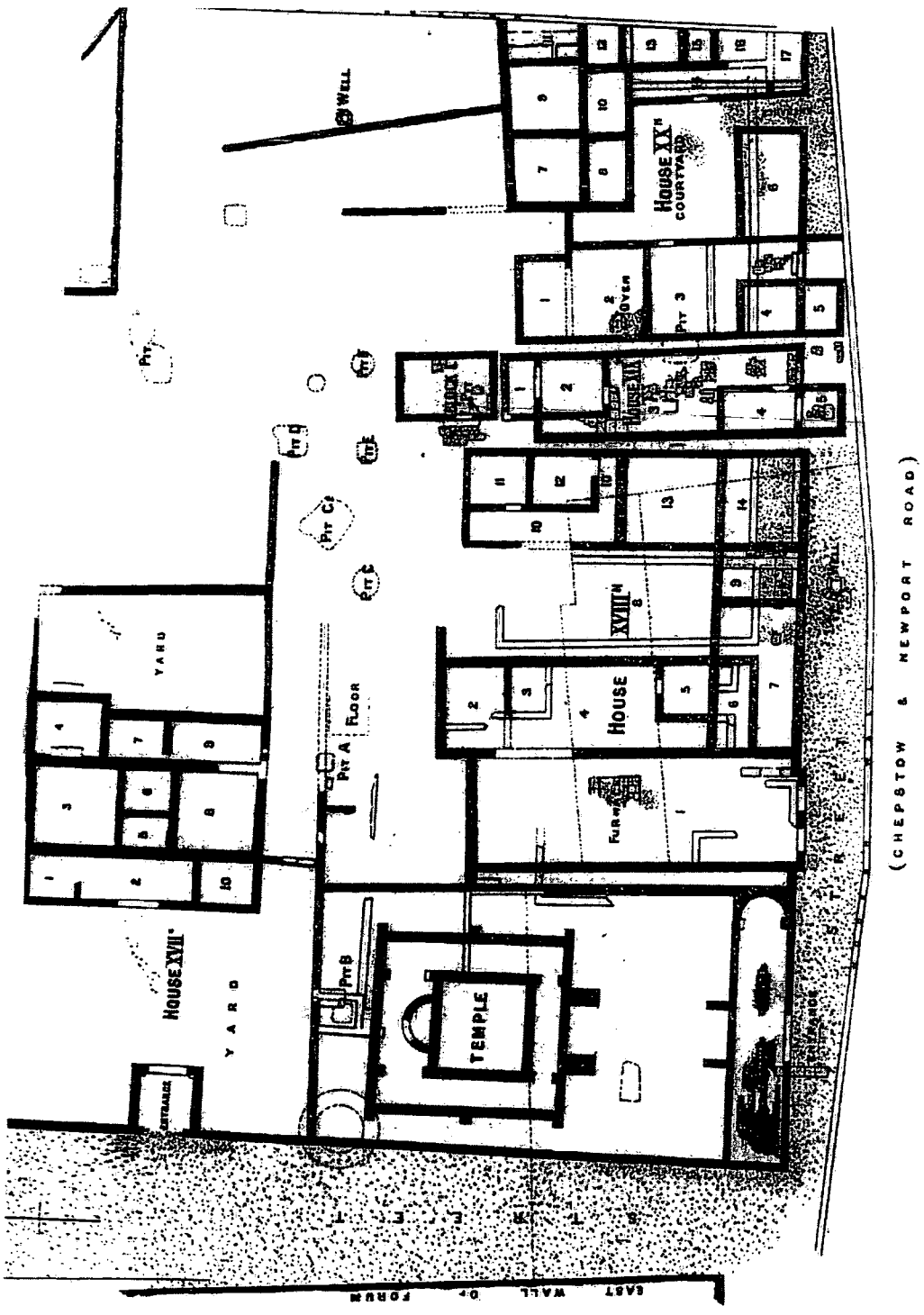


Newgate Street: Period VII (beginning), including Buildings J, K and L. Scale: 1:200.

Figure 32



Strip-buildings and town houses excavated by Bushe-Fox. Between Sites IV and VI is a classical-style temple (Site V).


WELL
HOUSE XX
COURTYARD
OVEN
PIT 3
HOUSE XIX
PIT C
PIT D
PIT E
HOUSE XVIII
HOUSE
FURNACE
PIT A
FLOOR
YARD
HOUSE XVII
YARD
PIT B
TEMPLE
ENTRANCE
EAST WALL OF FORUM
(CHEPSTOW & NEWPORT ROAD)

Period 1
Period 2
Period 3
Period 4
Metres
Feet

Figure 35

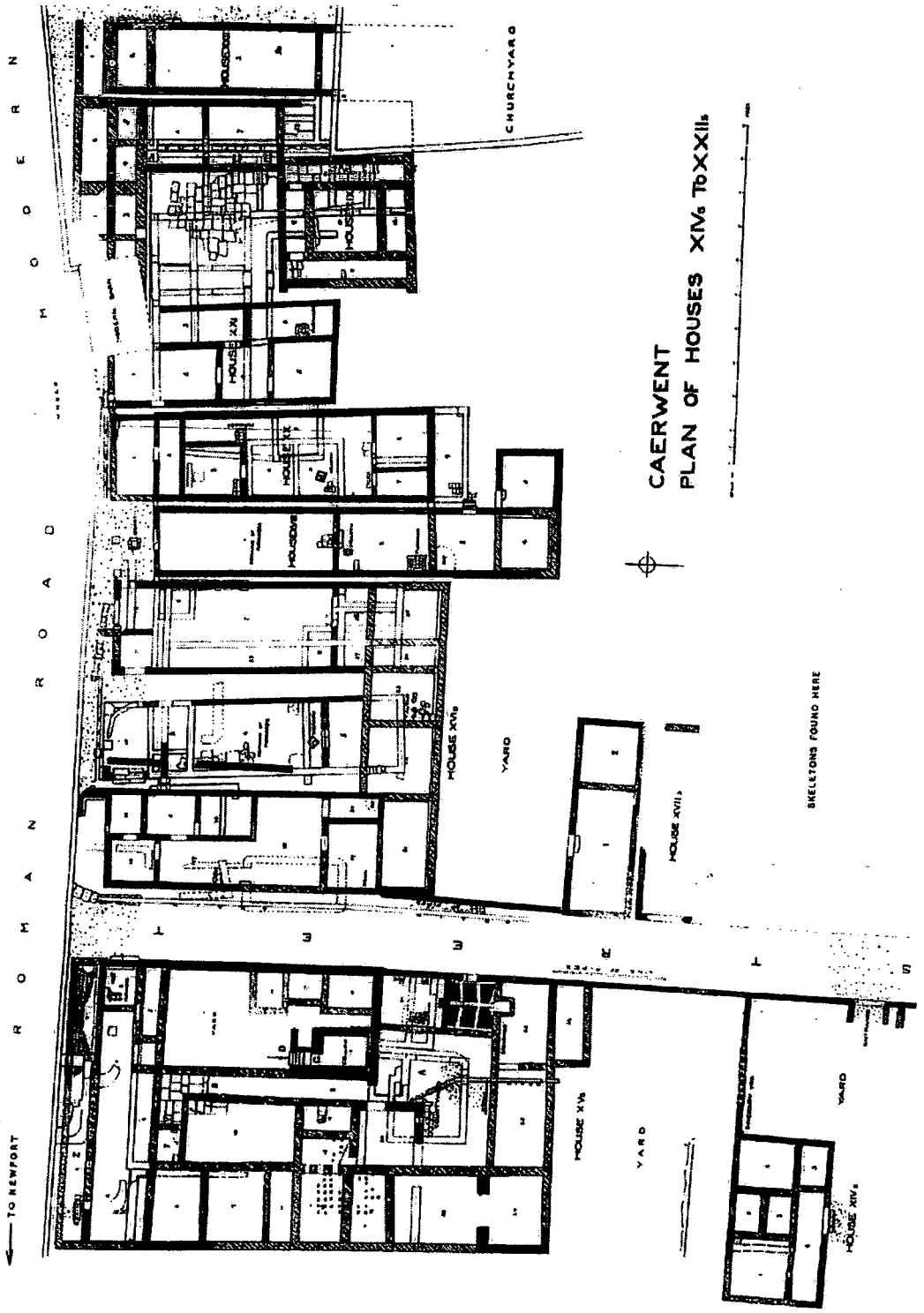
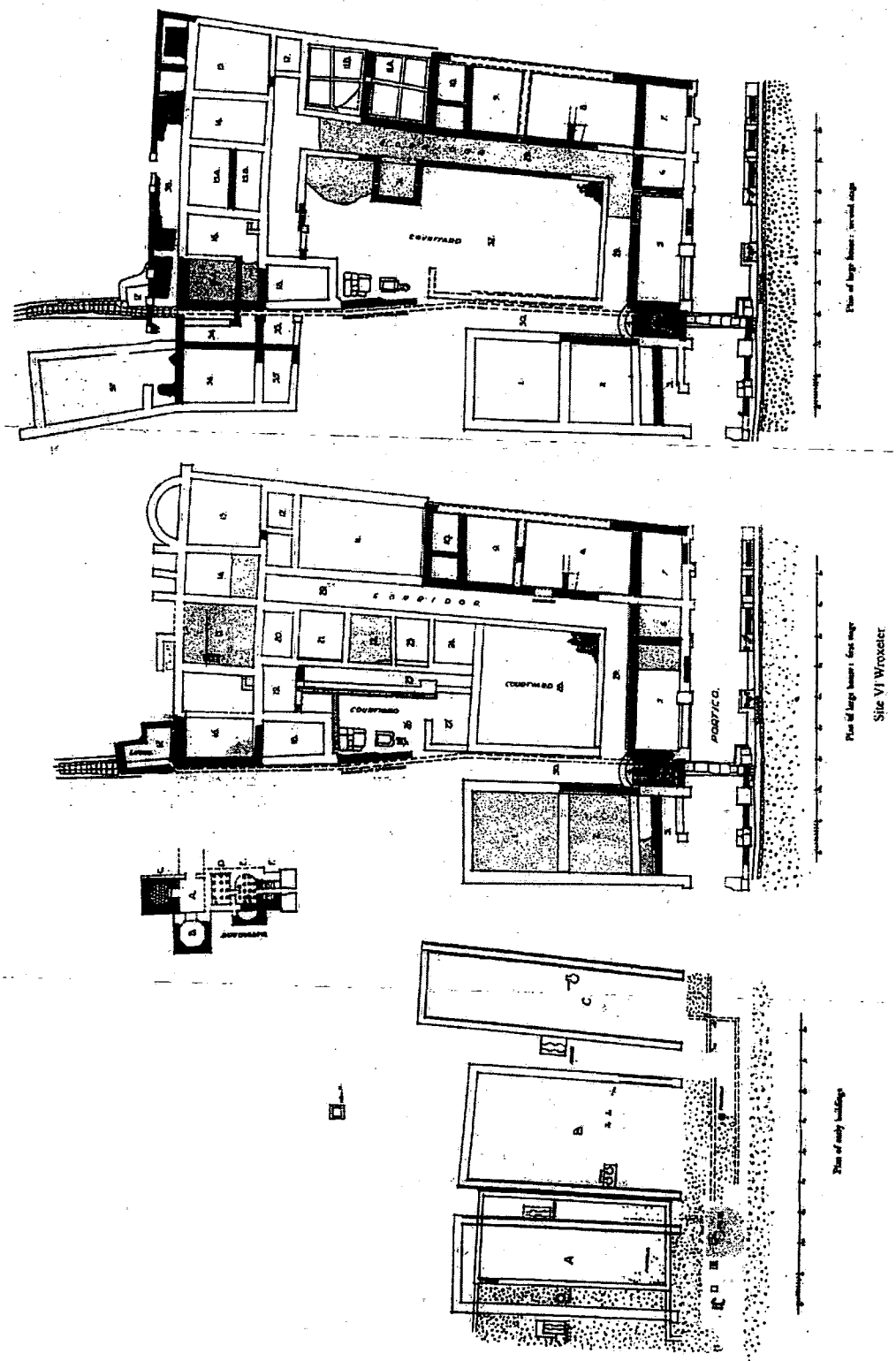

CAERWENT
PLAN OF HOUSES XIV & XXII
CHURCHYARD
HOUSE XIV
HOUSE XV
HOUSE XVI
HOUSE XVII
HOUSE XVIII
HOUSE XIX
HOUSE XX
HOUSE XXI
HOUSE XXII
YARD
YARD
YARD
SKELETONS FOUND HERE
ROMAN ROAD
TO NEWPORT

Figure 36


COURTYARD
COURTYARD
COURTYARD
COURTYARD
PORTICO
Site VI Wroxeter

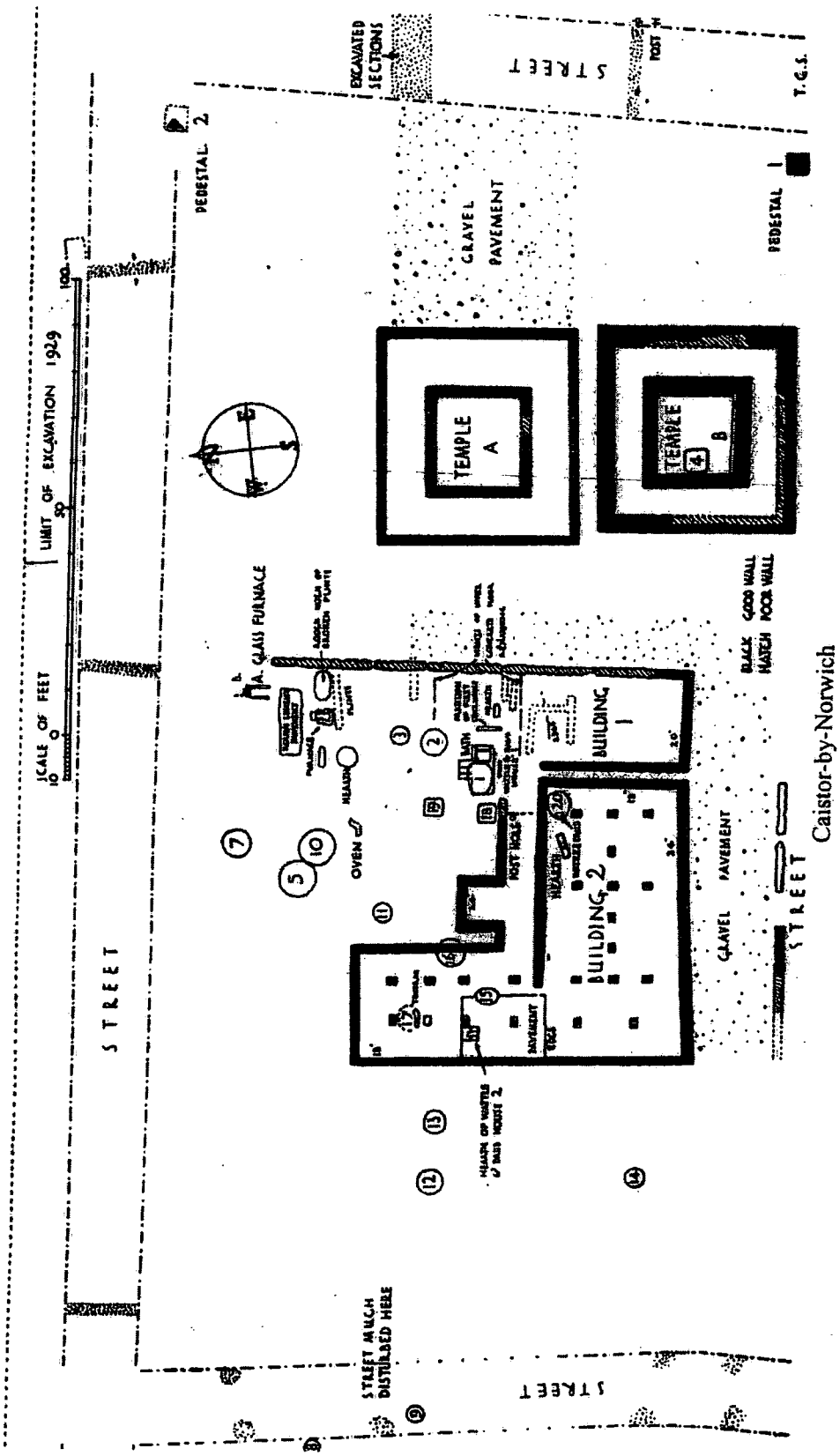
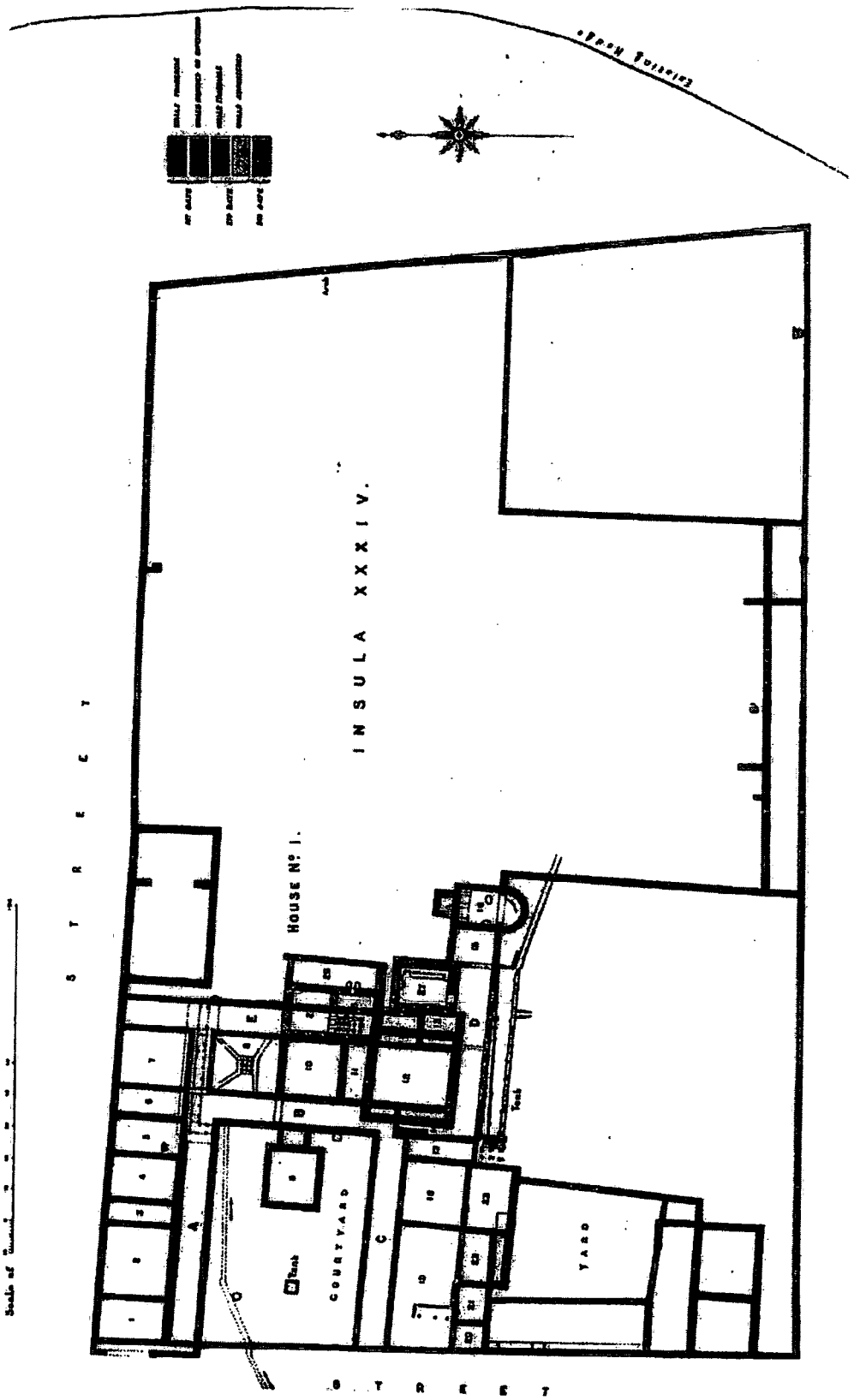

STREET
LIMIT OF EXCAVATION 1929
SCALE OF FEET
PEDESTAL 2
EXCAVATED SECTIONS
STREET
T.C.S.
PEDESTAL 1
GRAVEL PAVEMENT
TEMPLE A
TEMPLE B
A. GLASS FURNACE
BUILDING 1
BUILDING 2
OVEN
POST HOLE
GOOD WALL
POOR WALL
BLACK MATCH
GRAVEL PAVEMENT
STREET
STREET MUCH DISTURBED HERE
STREET
Caistor-by-Norwich

Figure 38



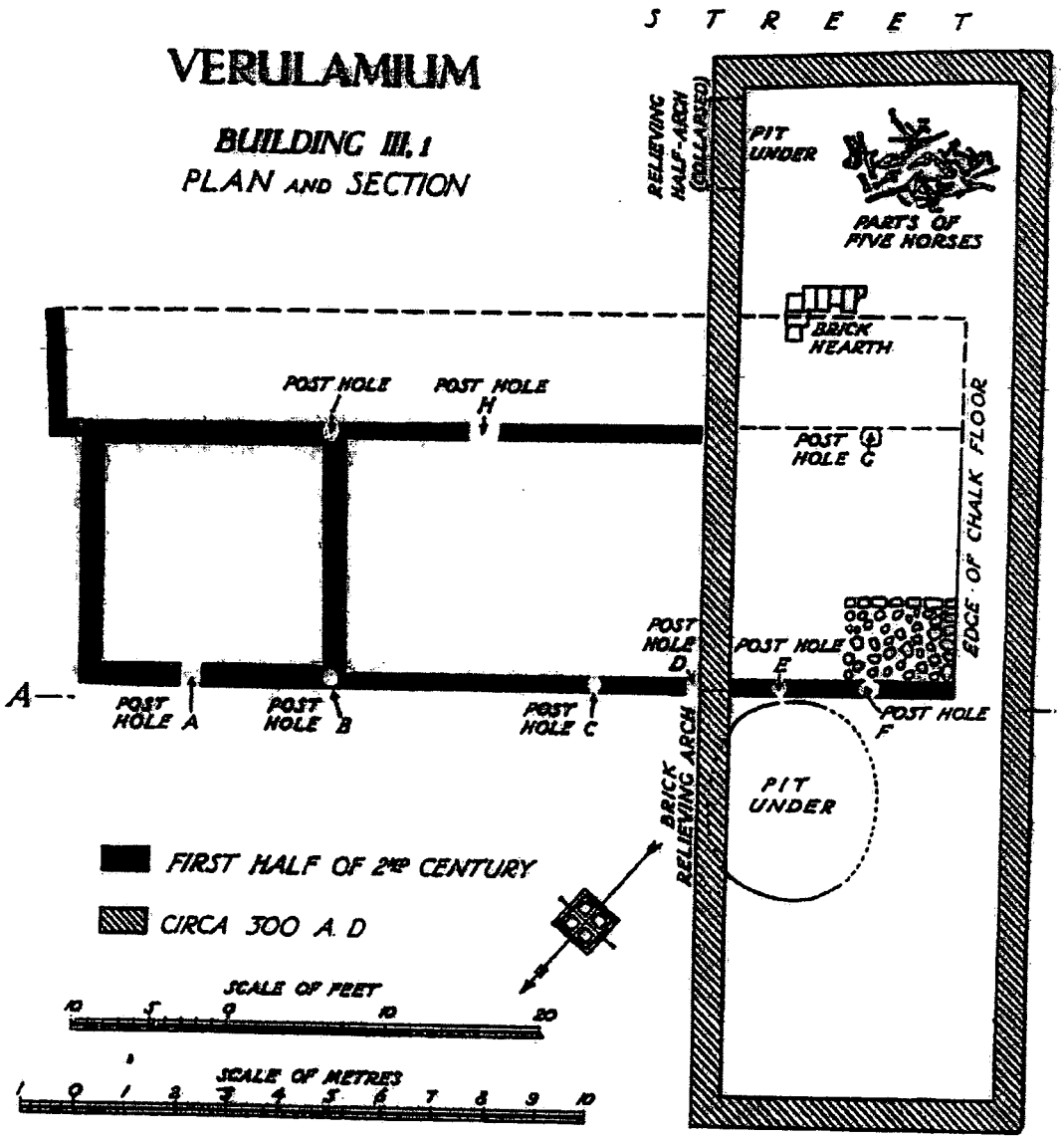
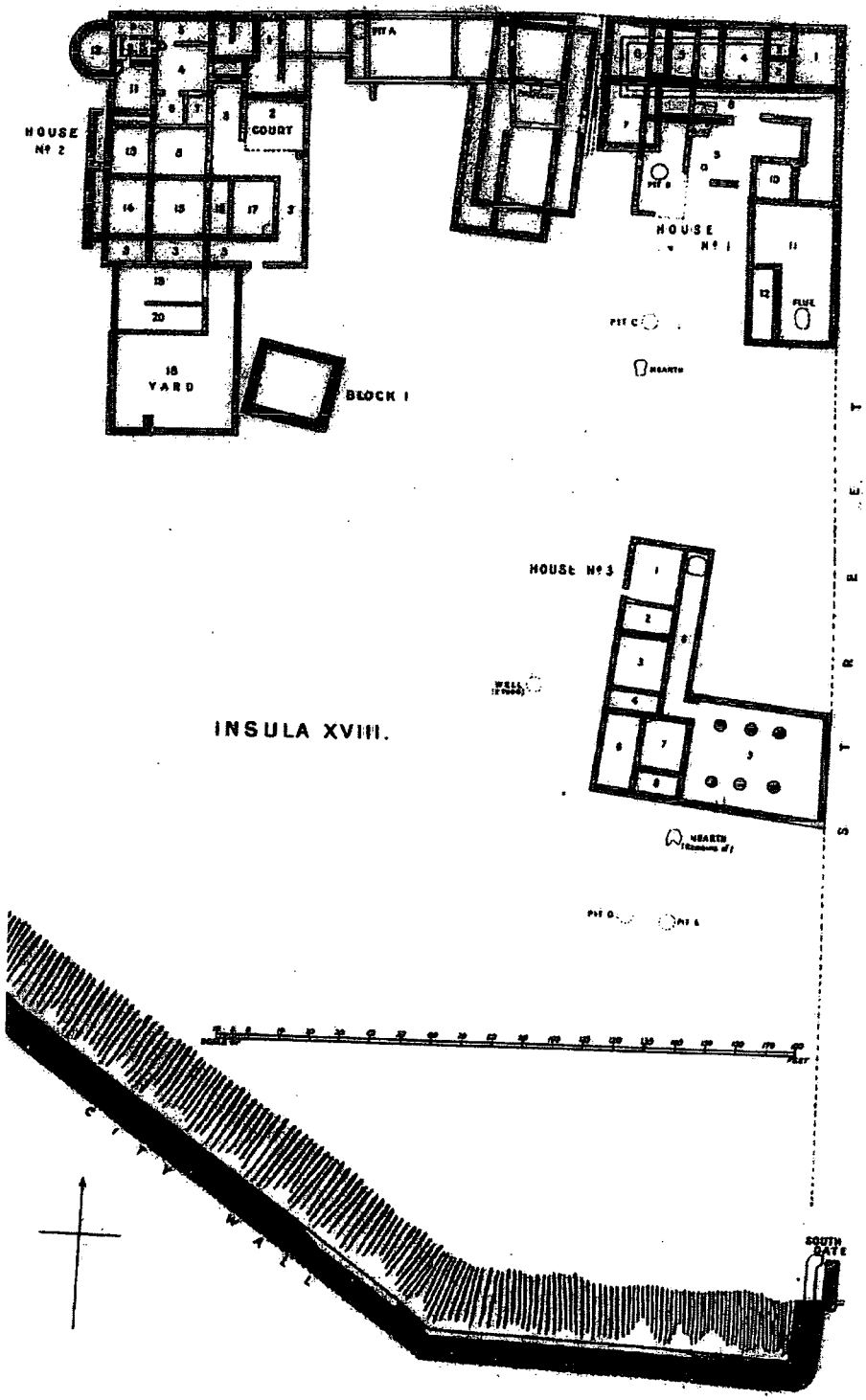
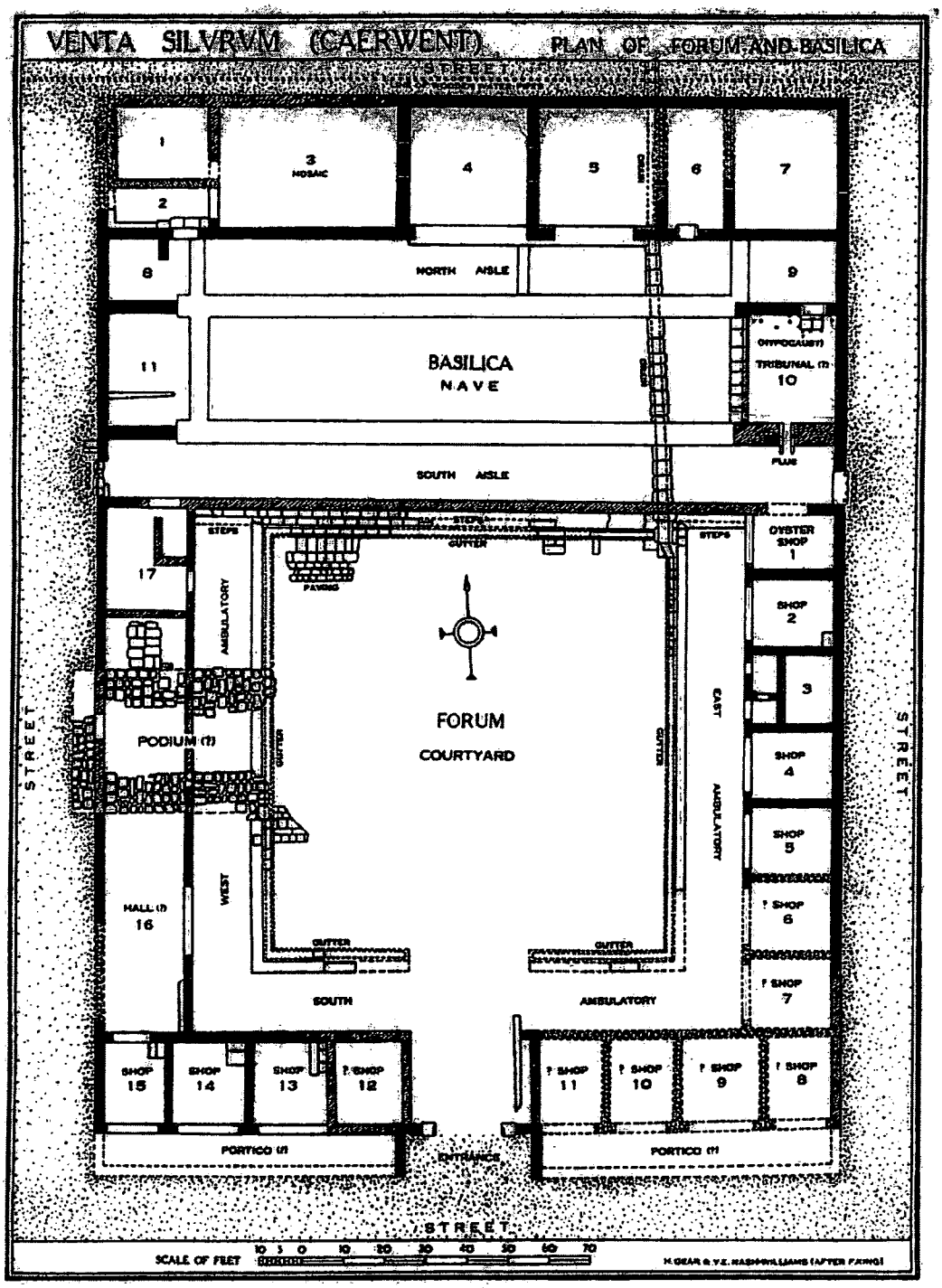

VERULAMIUM
BUILDING III, 1
PLAN AND SECTION
STREET
RELIEVING HALF-ARCH (DILAPIDATED)
PIT UNDER
PARTS OF FIVE HORSES
BRICK HEARTH
POST HOLE
POST HOLE H
POST HOLE G
EDGE OF CHALK FLOOR
POST HOLE D
POST HOLE E
POST HOLE F
POST HOLE A
POST HOLE B
POST HOLE C
A
BRICK RELIEVING ARCH
PIT UNDER
FIRST HALF OF 2ND CENTURY
CIRCA 300 A.D
SCALE OF FEET
SCALE OF METRES

Figure 40


HOUSE Nº 2
COURT
PIT A
HOUSE Nº 1
PIT C
HEARTH
FLUE
BLOCK I
YARD
HOUSE Nº 3
WELL
INSULA XVIII.
HEARTH
PIT D
PIT E
SOUTH GATE


VENTA SILVRVM (CAERWENT) PLAN OF FORUM AND BASILICA
STREET
1
2
3
MOSAIC
4
5
DRAIN
6
7
8
NORTH AISLE
9
11
BASILICA
NAVE
HYPOCAUST
TRIBUNAL (?)
10
PLAN
SOUTH AISLE
STEPS
GUTTER
STEPS
OYSTER SHOP 1
17
PAVING
AMBULATORY
SHOP 2
3
FORUM
COURTYARD
EAST AMBULATORY
STREET
STREET
PODIUM (?)
GUTTER
GUTTER
SHOP 4
SHOP 5
WEST
HALL (?)
16
? SHOP 6
GUTTER
GUTTER
? SHOP 7
SOUTH
AMBULATORY
SHOP 15
SHOP 14
SHOP 13
? SHOP 12
? SHOP 11
? SHOP 10
? SHOP 9
? SHOP 8
PORTICO (?)
ENTRANCE
PORTICO (?)
STREET
SCALE OF FEET
10 5 0 10 20 30 40 50 60 70

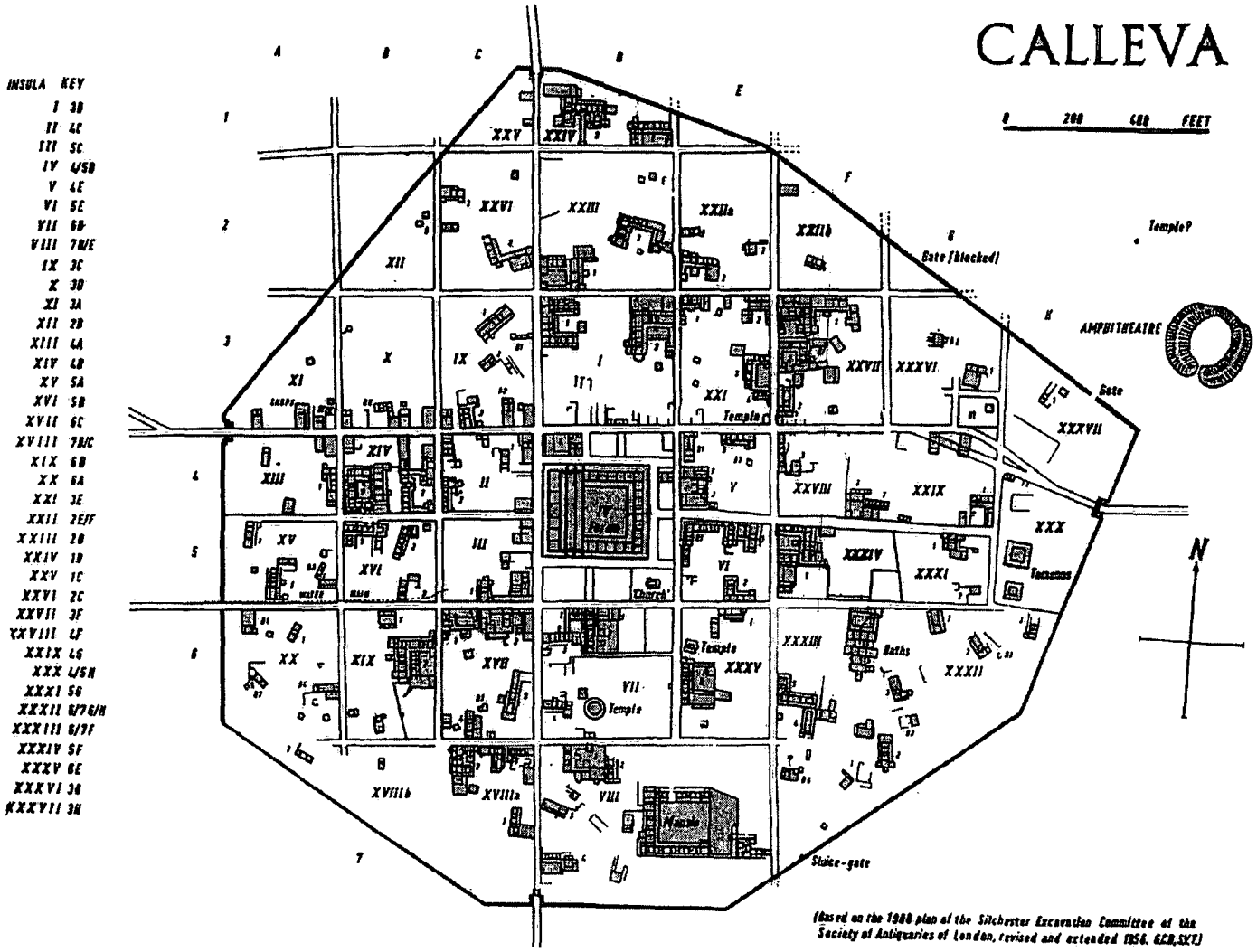

CALLEVA
0 200 400 FEET
INSULA KEY
I 3B
II 4C
III 5C
IV 4/5B
V 4E
VI 5E
VII 6B
VIII 7B/E
IX 3C
X 3B
XI 3A
XII 2B
XIII 4A
XIV 4B
XV 5A
XVI 5B
XVII 6C
XVIII 7B/C
XIX 6B
XX 6A
XXI 3E
XXII 2E/F
XXIII 2B
XXIV 1B
XXV 1C
XXVI 2C
XXVII 3F
XXVIII 4F
XXIX 4G
XXX 4/5A
XXXI 5G
XXXII 6/7G/A
XXXIII 6/7F
XXXIV 5F
XXXV 6E
XXXVI 3A
XXXVII 3A
Temple?
Gate (blocked)
AMPHITHEATRE
Gate
Temple
Temple
Baths
Temple
Temple
Mansio
Sluice-gate
N
(Based on the 1988 plan of the Silchester Excavation Committee of the Society of Antiquaries of London, revised and extended 1956, 62, 82, SXT)

Figure 42

Figure 43

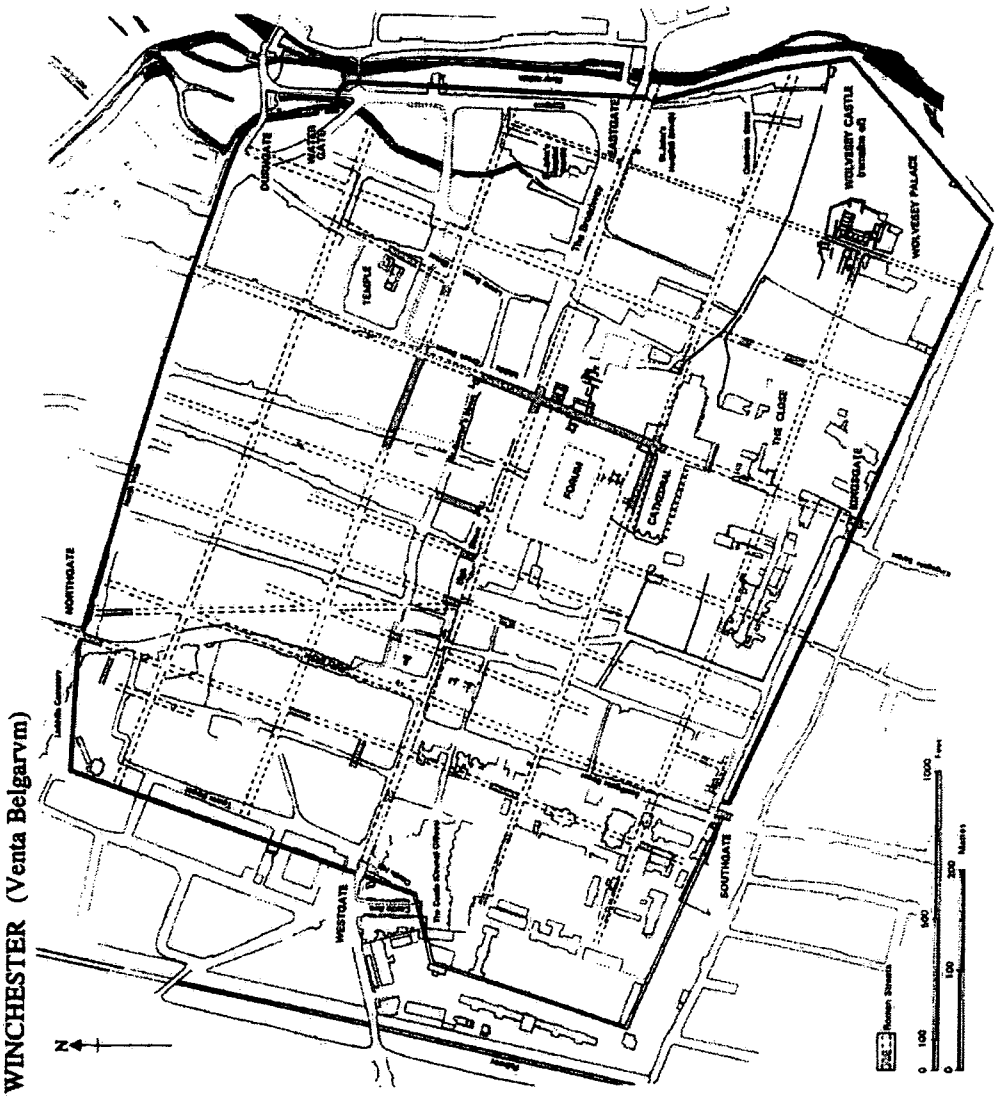
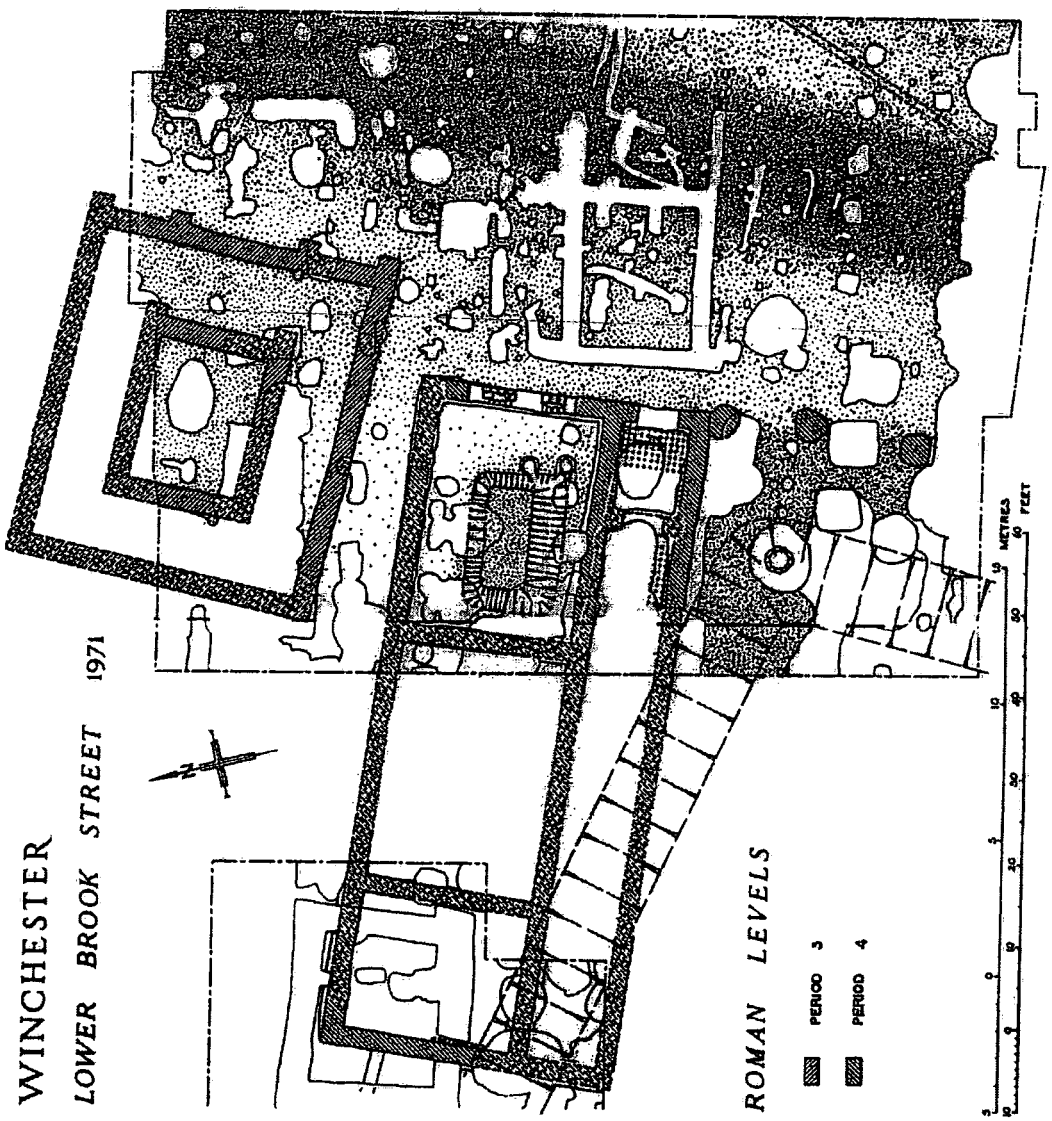
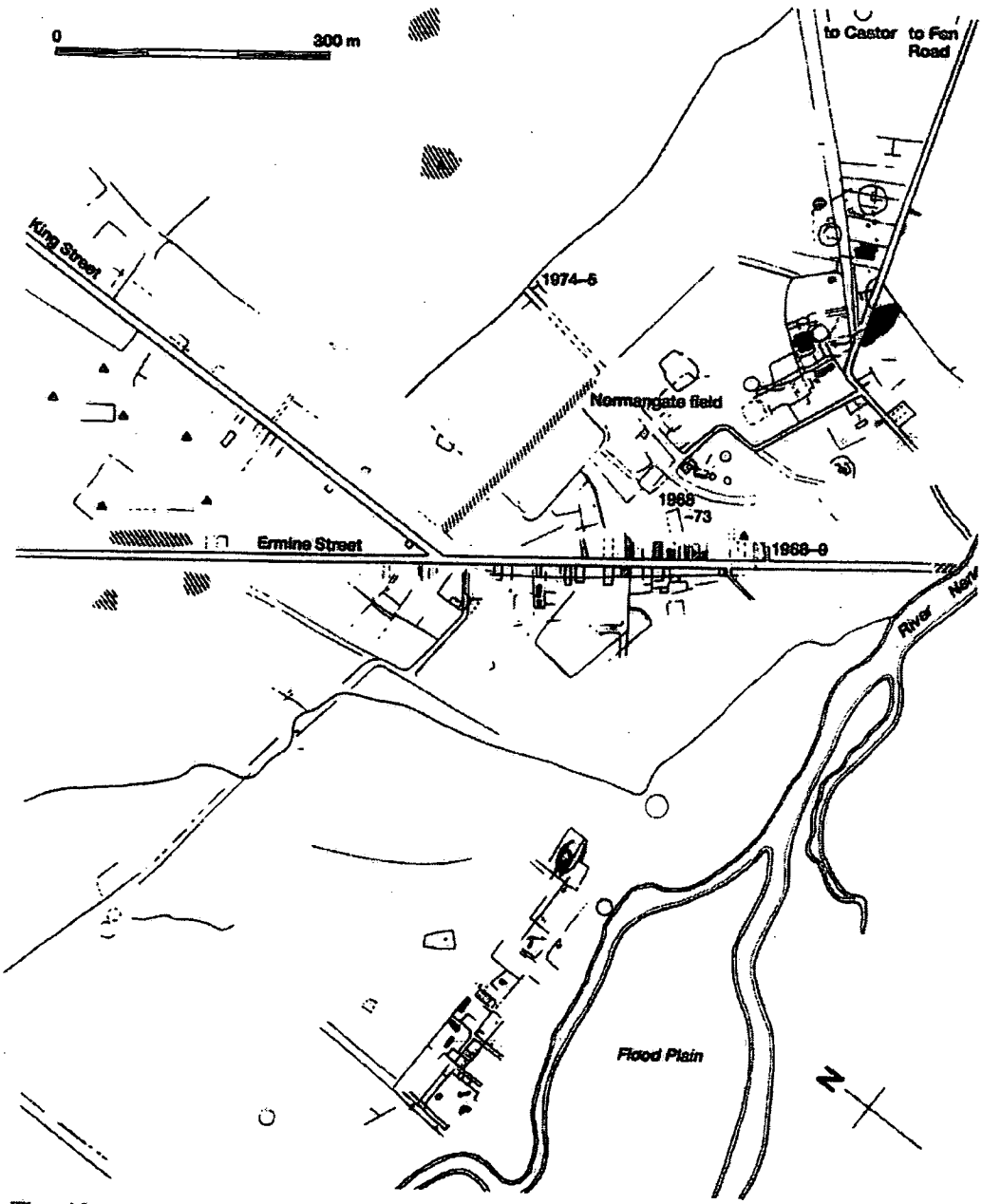

WINCHESTER (Venta Belgarvm)
N
NORTHGATE
WESTGATE
EASTGATE
SOUTHGATE
FORUM
CATHEDRAL
THE CLOSE
WOLVESEY CASTLE
WOLVESEY PALACE
TEMPLE
0
100
200
300
1000 Feet
100
0
100
200
300 Metres

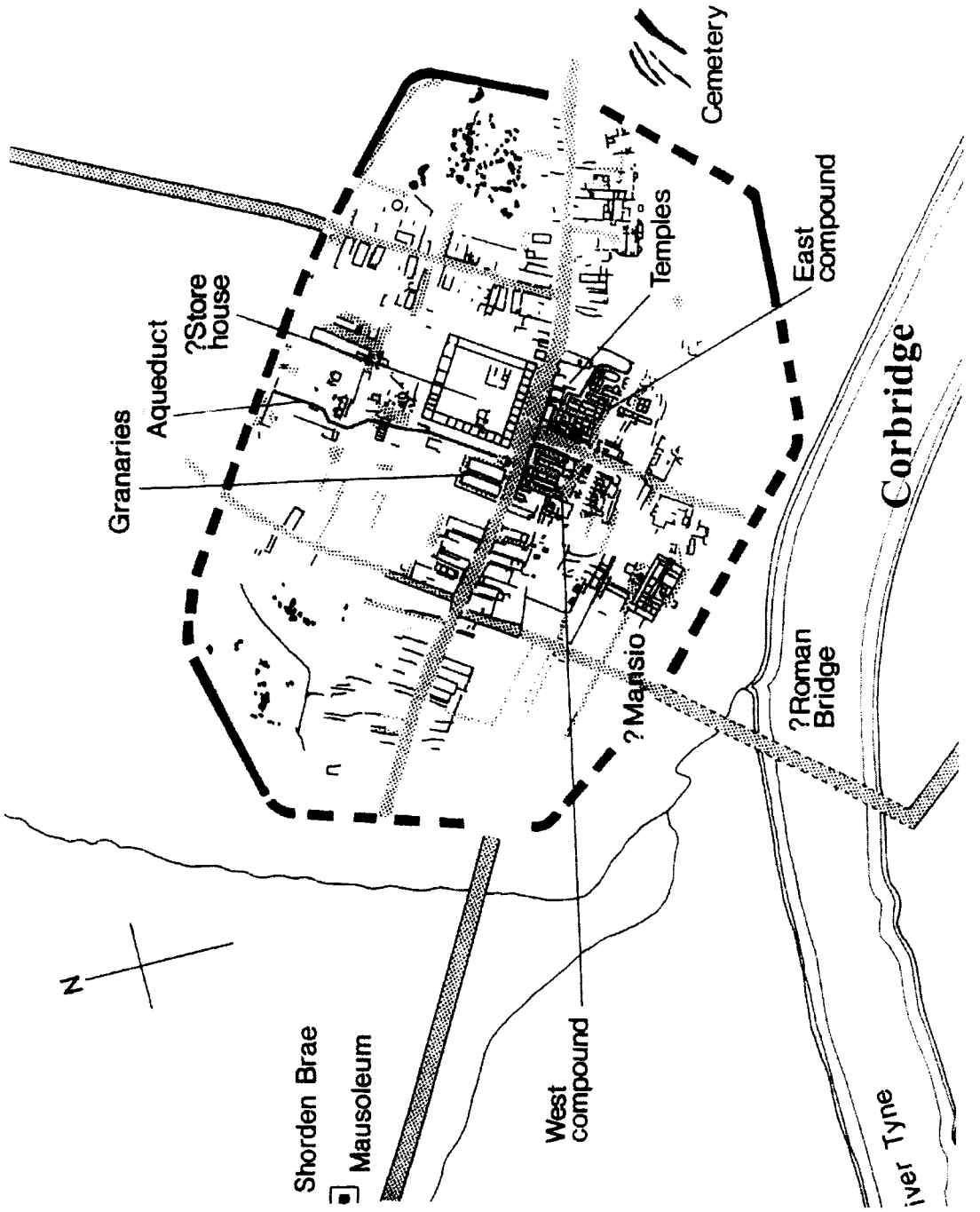
Figure 44

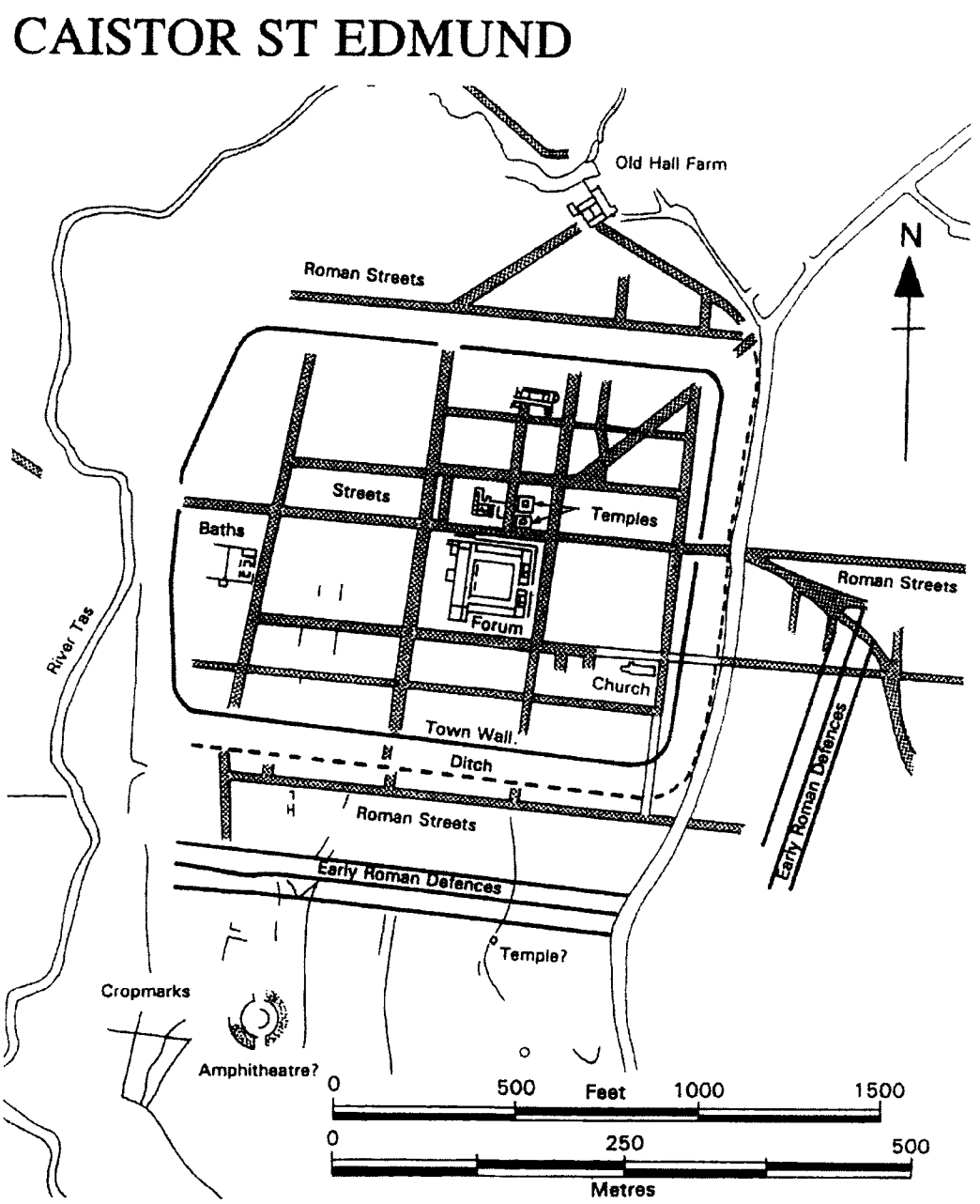

WINCHESTER
LOWER BROOK STREET 1971
ROMAN LEVELS
PERIOD 3
PERIOD 4
METRES
FEET



Water Newton, north of the River Nene (*after Mackreth*)

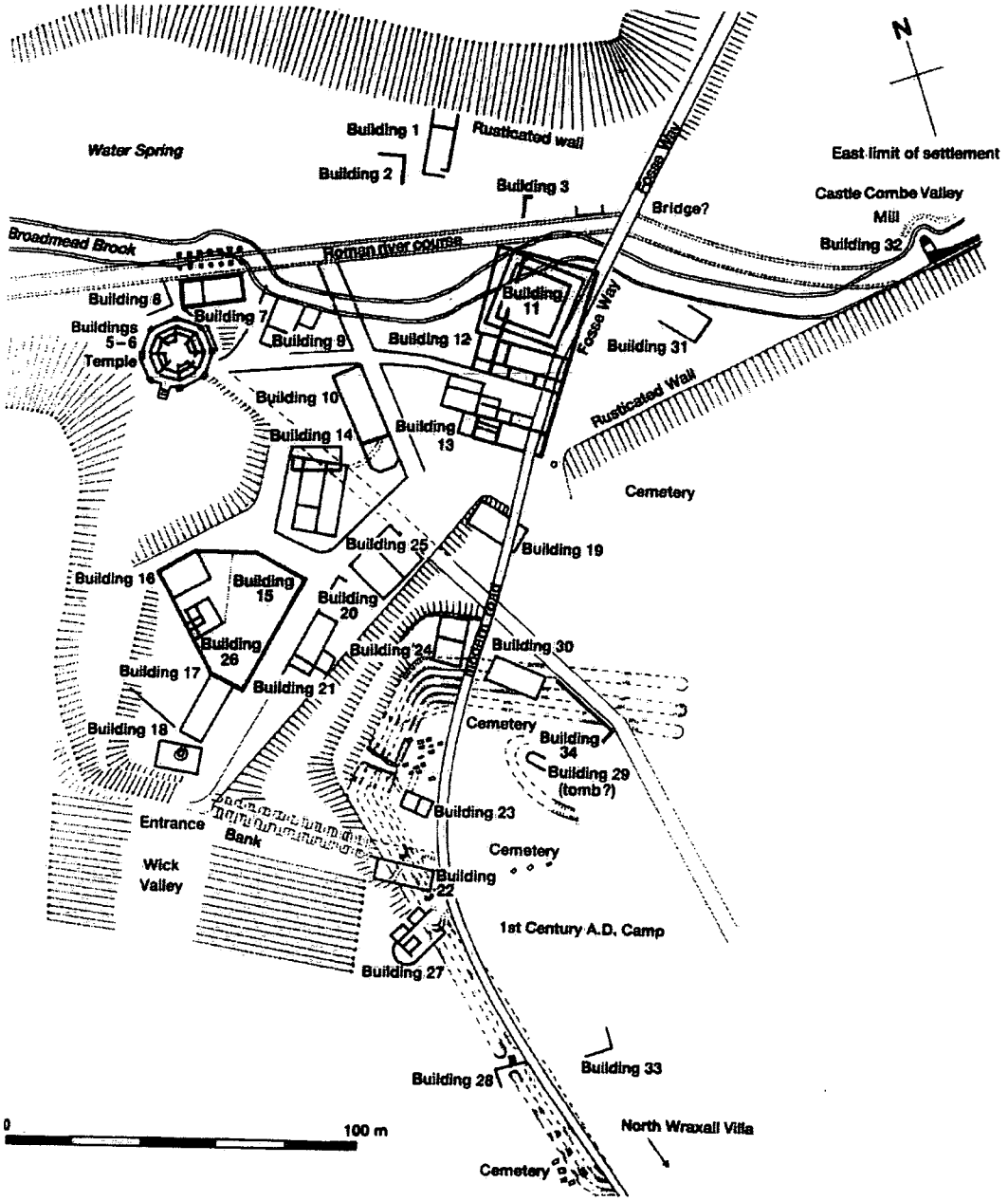
Figure 46


Granaries
Aqueduct
?Store house
Temples
Cemetery
East compound
Corbridge
?Roman Bridge
?Mansio
West compound
Shorden Brae
Mausoleum
N
iver Tyne

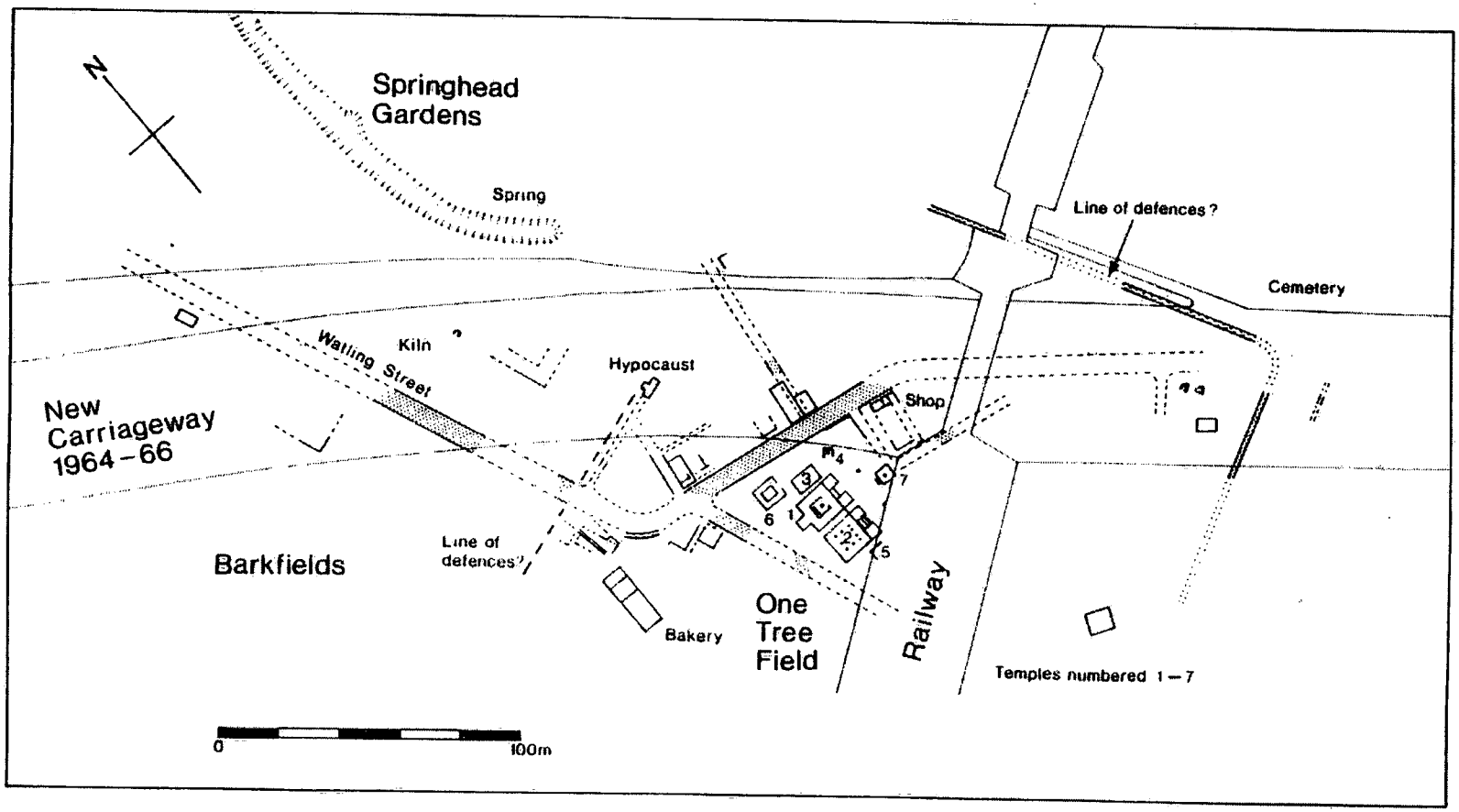


Plan of Caistor-by-Norwich (*after Norwich Castle Museum*)

Figure 48

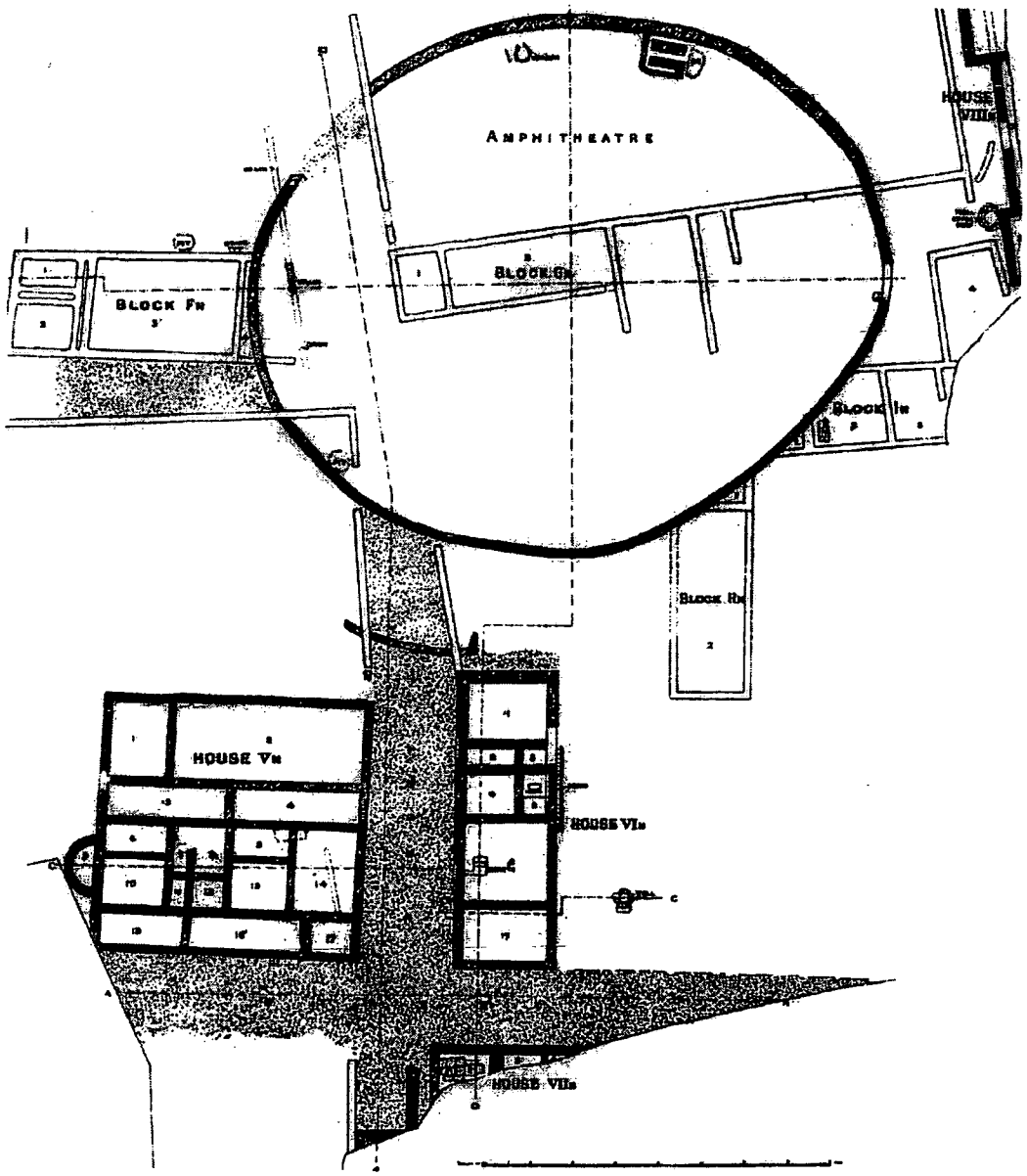


Nettleton (*after Wedlake*)

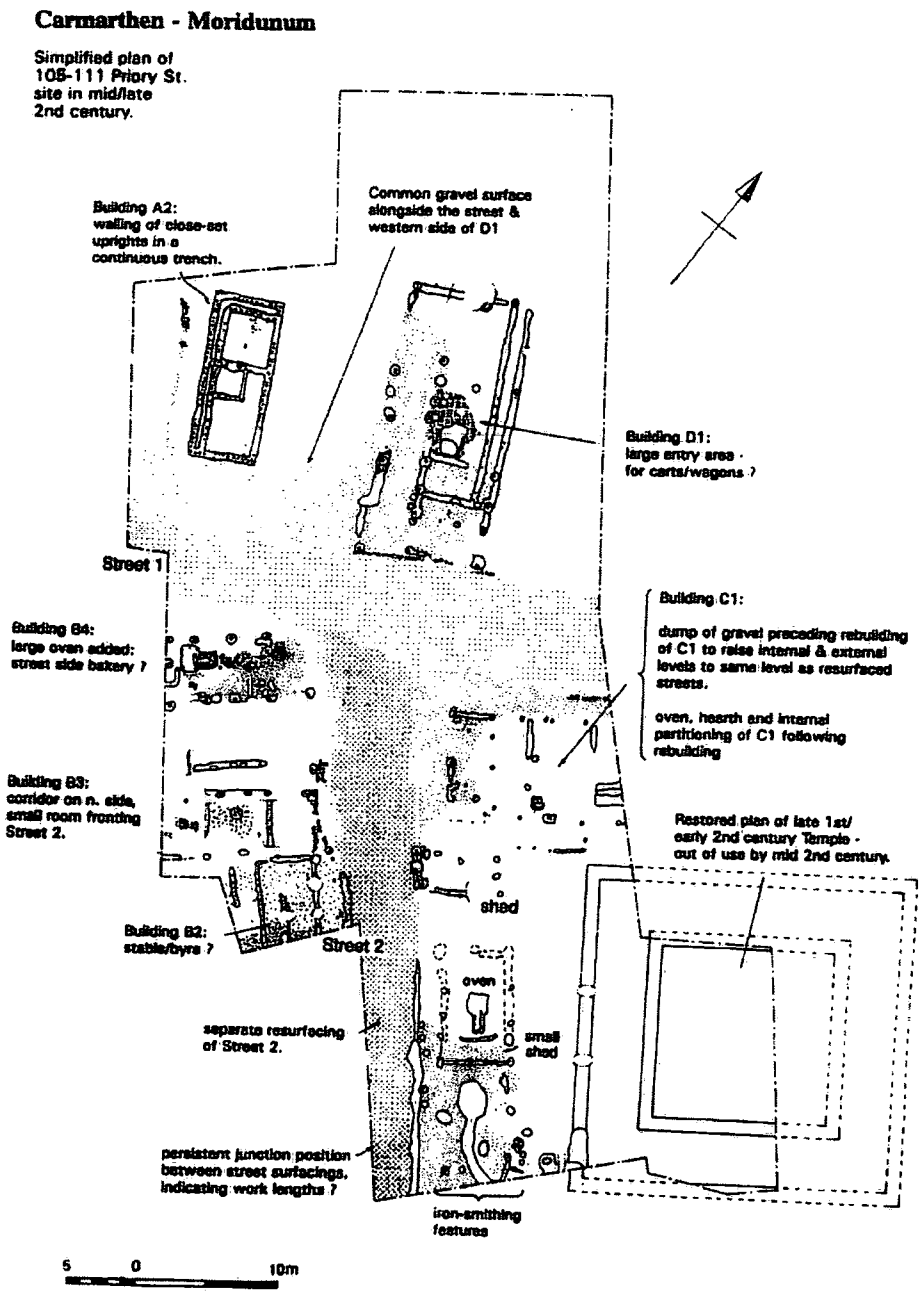


Springhead (after Penn and Harker)

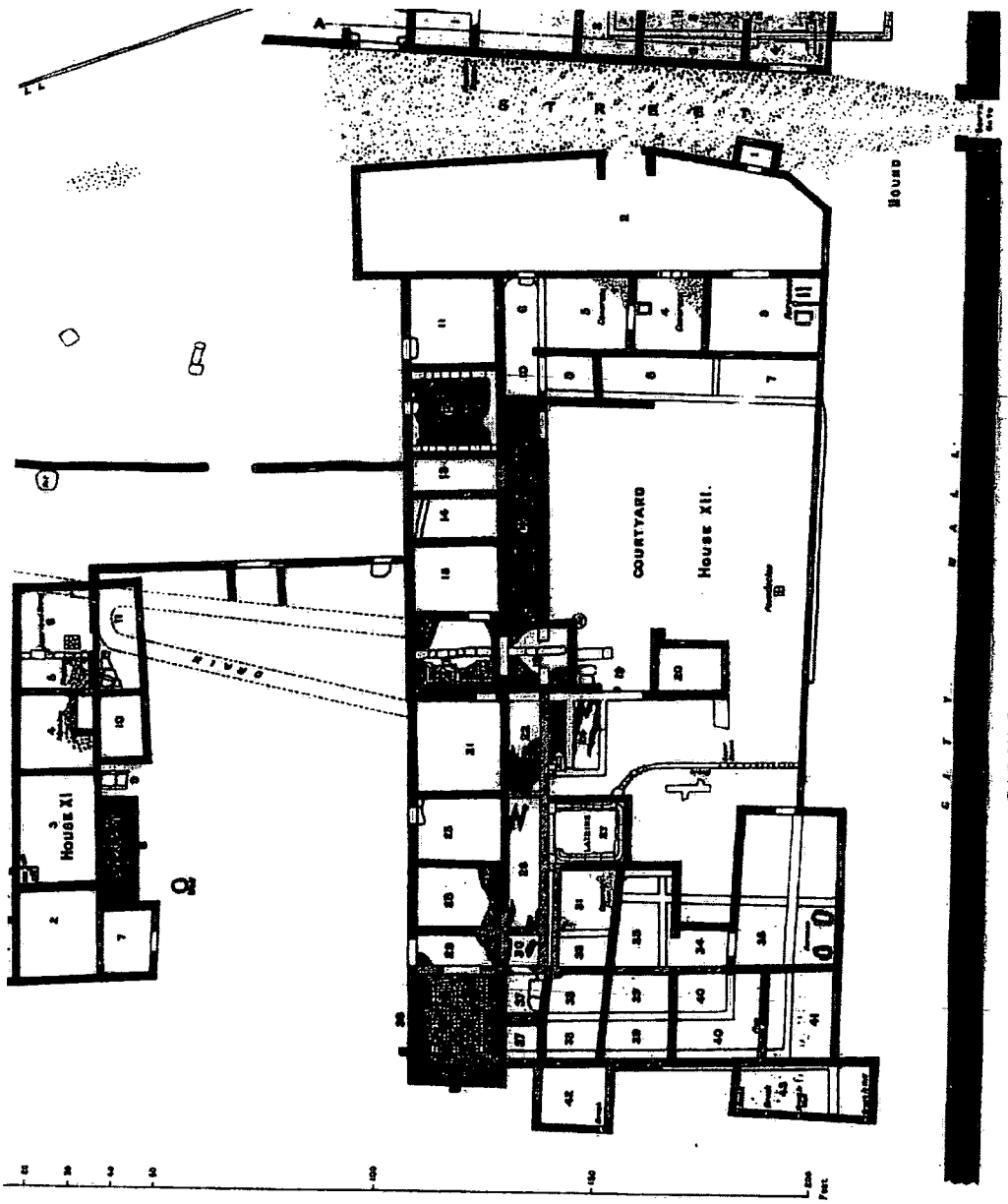
Figure 49



CAERWENT.—PLAN OF HOUSES Vn, VIn, VIIn & VIIIn, BLOCKS Fn, Gn, Hn & In, AND THE AMPHITHEATRE.

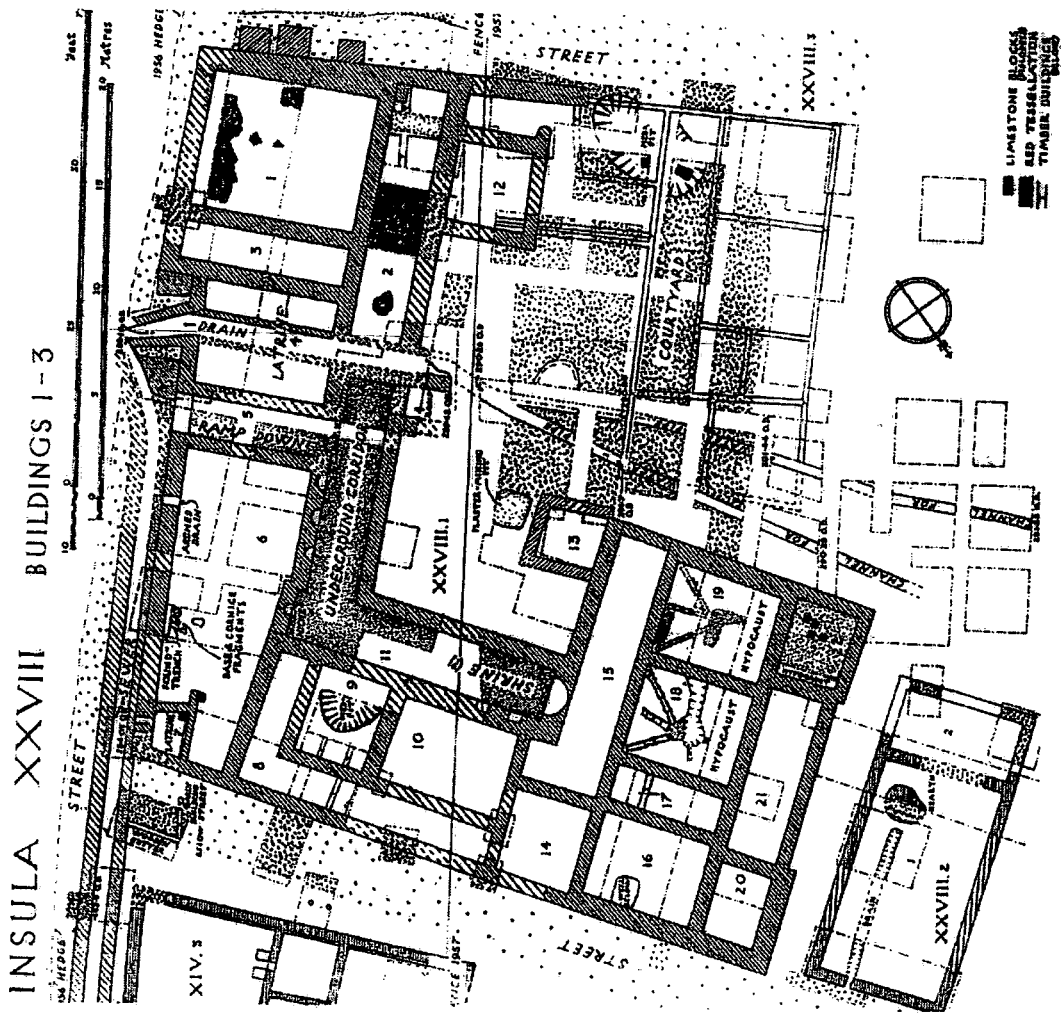


Simplified plan of 1980–84 excavations by Dyfed Archaeological Trust, to the rear of nos 105–11 Priory Street, showing the buildings of mid to late 2nd century date

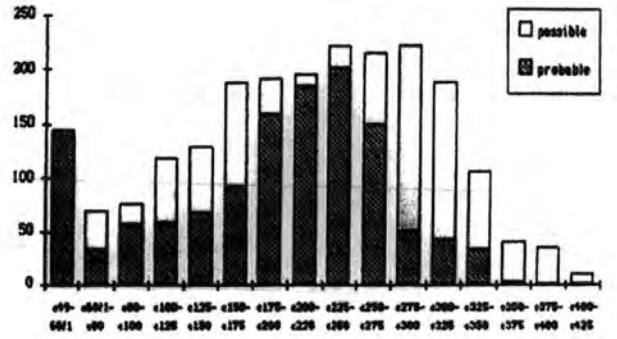


CAERWENT.—PLAN OF HOUSES X, XI, XII & XIII.

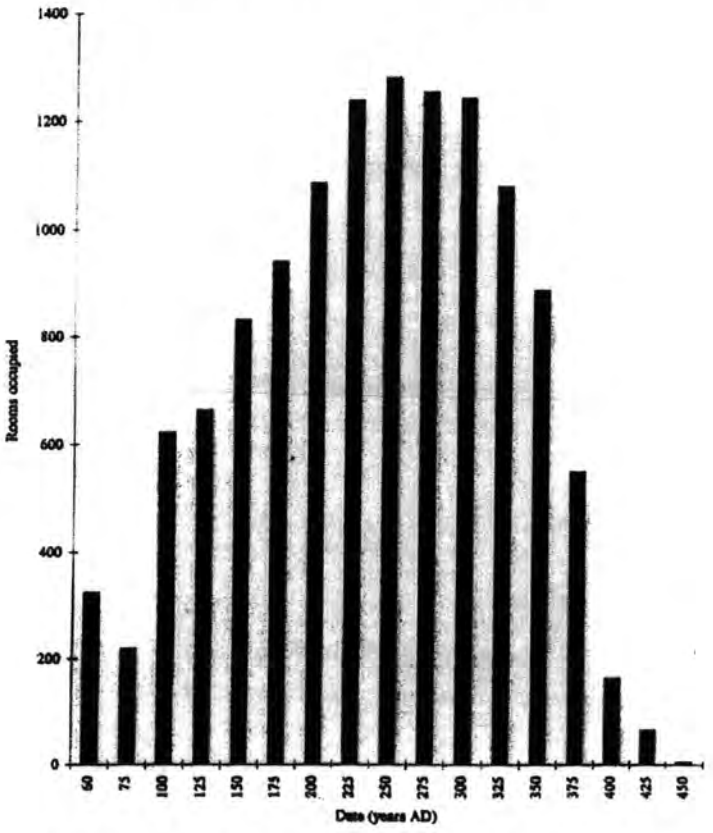
Figure 53


INSULA XXVIII
BUILDINGS 1-3
STREET
XXVIII.1
XXVIII.3
XXVIII.2
XIV.3
SHRINE
UNDERGROUND COUDRE
COURTYARD
HYPOCAUST
DRAIN
LATRINE
RAMP
STREET

Number of rooms occupied in private houses in Verulamium, by period

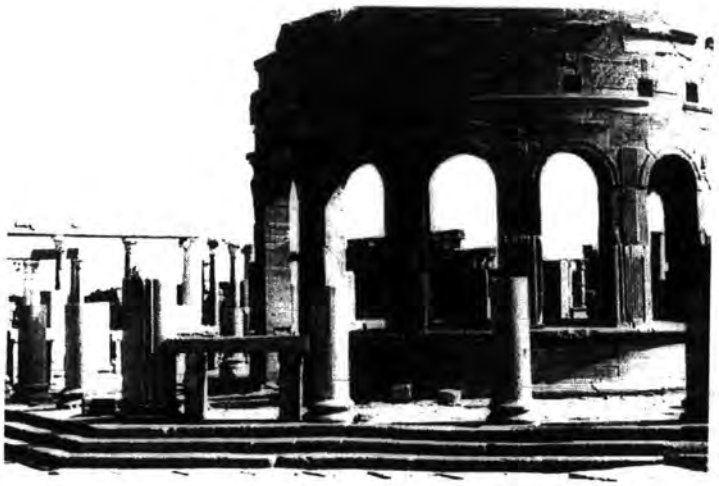


Colchester: Total number of rooms occupied in private buildings by period.



Number of rooms occupied in private buildings in Romano-British towns, by period

Figure 55



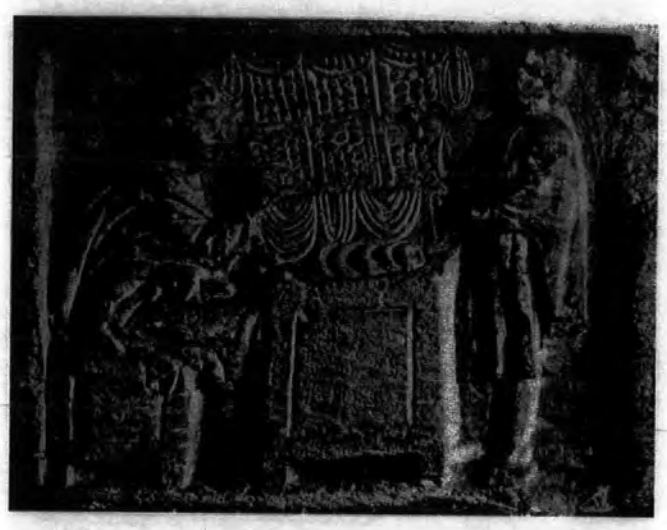
a. Market at Leptis Magna .

b. Stone counter at Leptis Magna.

c. Behind stone counters at Leptis Magna.

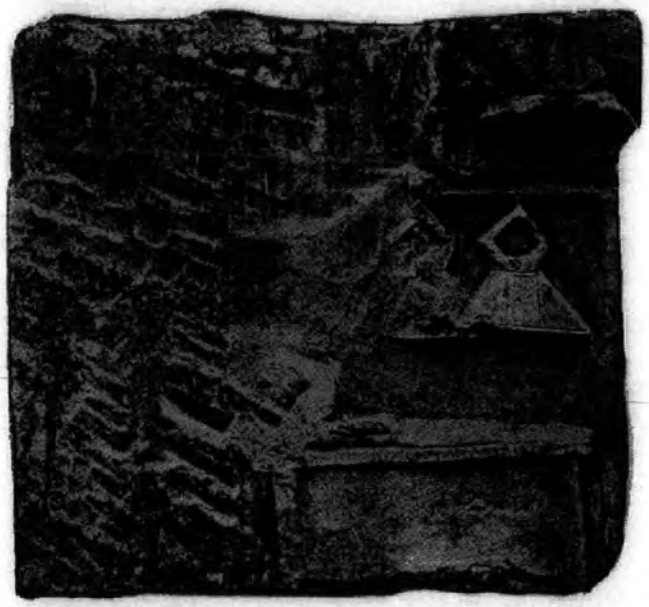
d. Measuring counter at Djemila.

Figure 56



a. Relief of vendor, Metz .

b. Relief of pharmacist, Lillebonne.



c. Relief of cloth merchant, Sens.

Figure 57

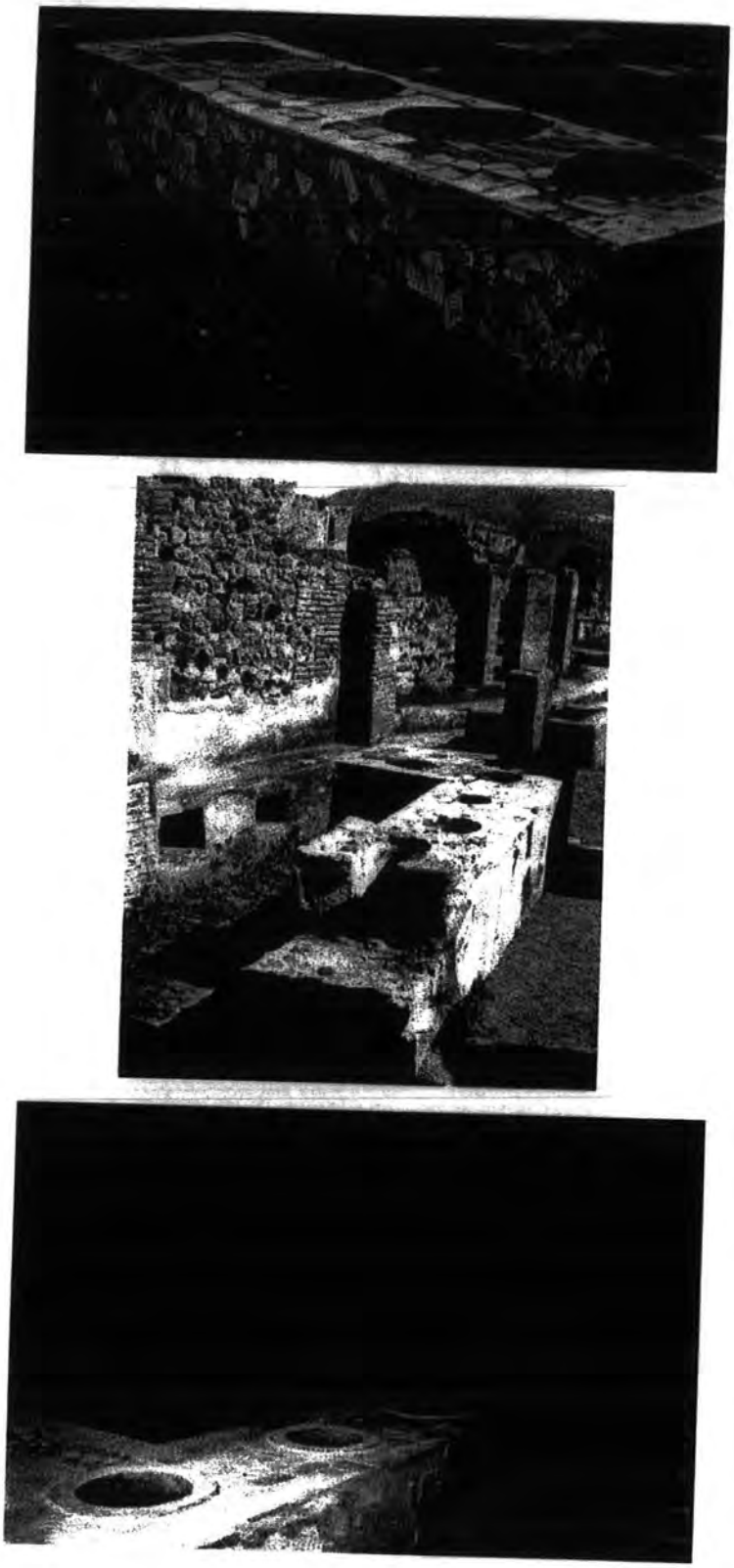


Figure 58

a. Sainte-Chapelle, Dijon.

b. Til-Chatel, Dijon.

Figure 59

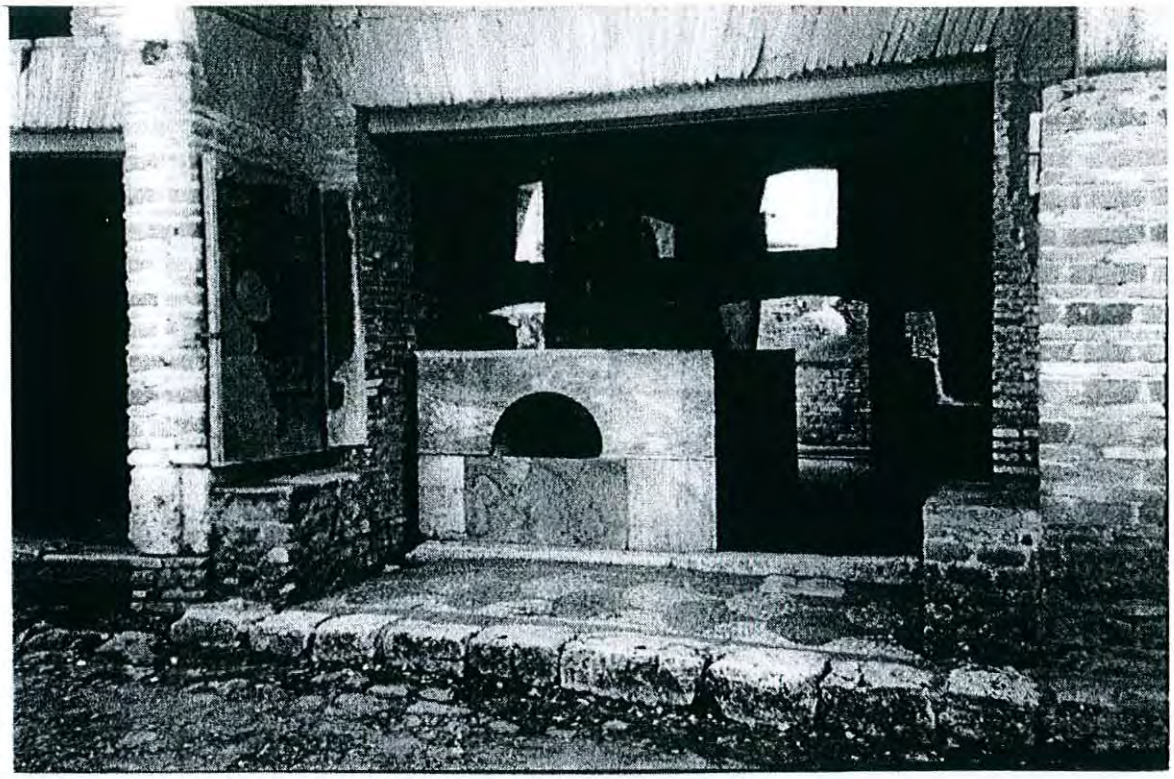
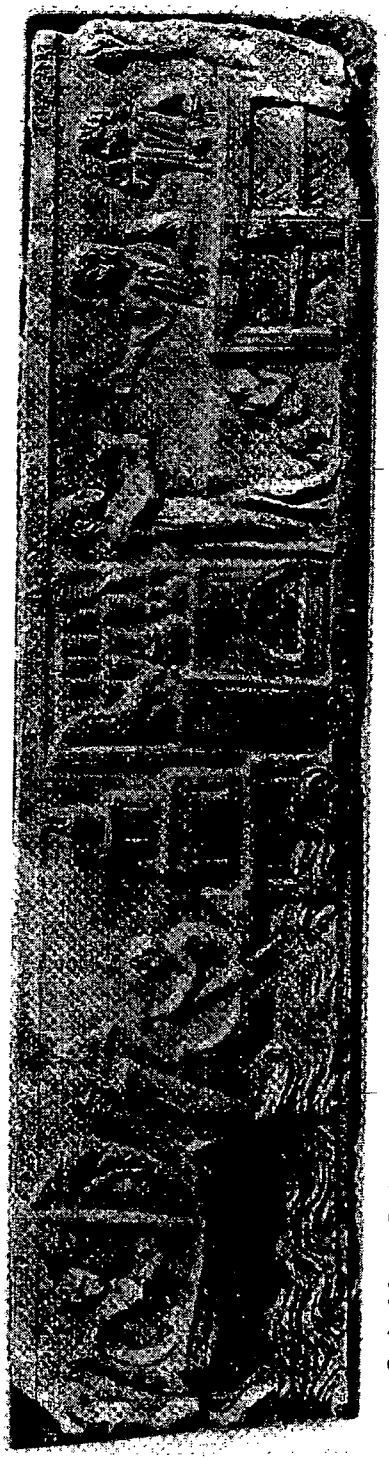
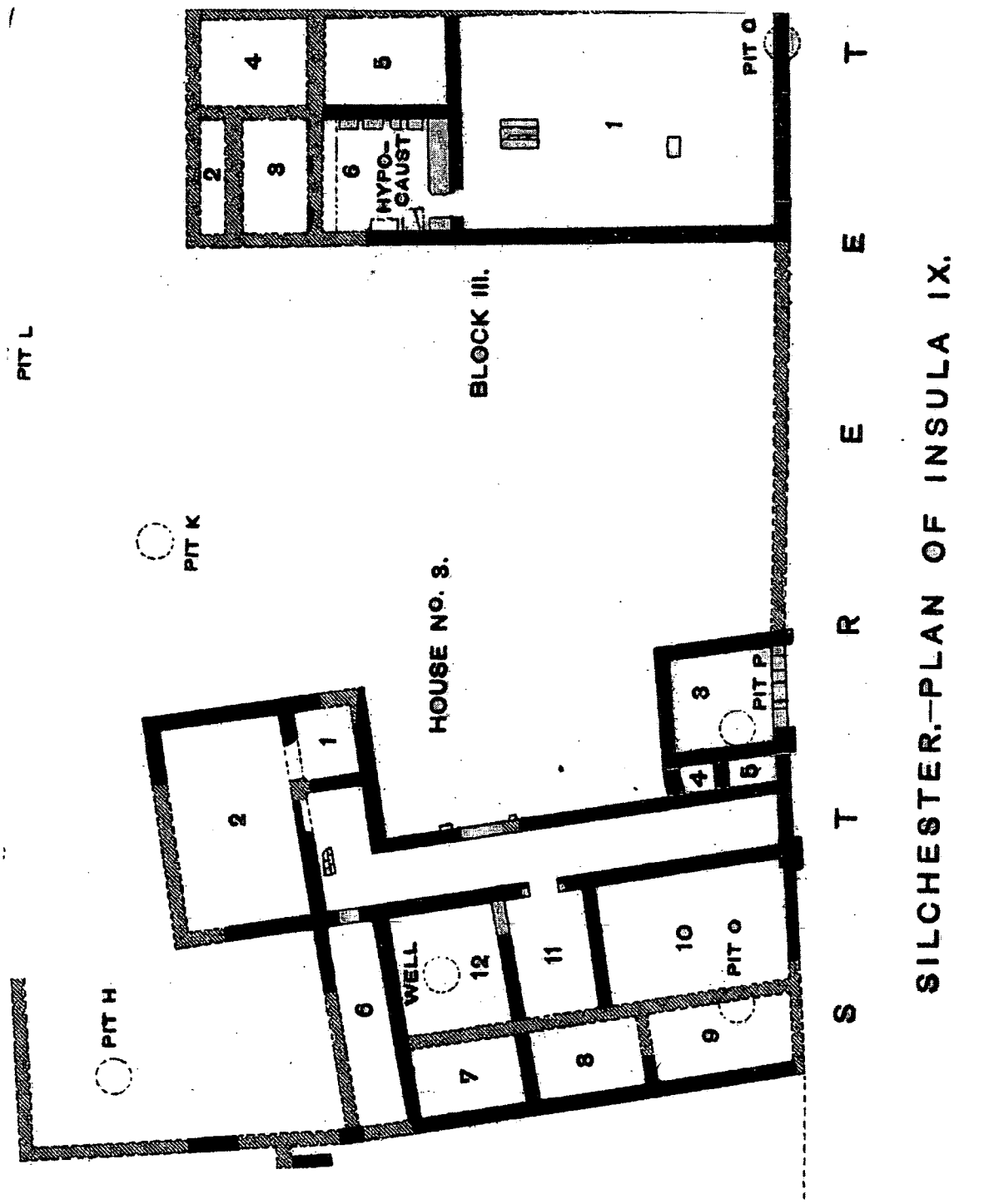


Figure 60



Ostia, Museo Ostiense, Magazzino. Sarcophagus front with scenes of a harbor and a tavern, Isola Sacra.

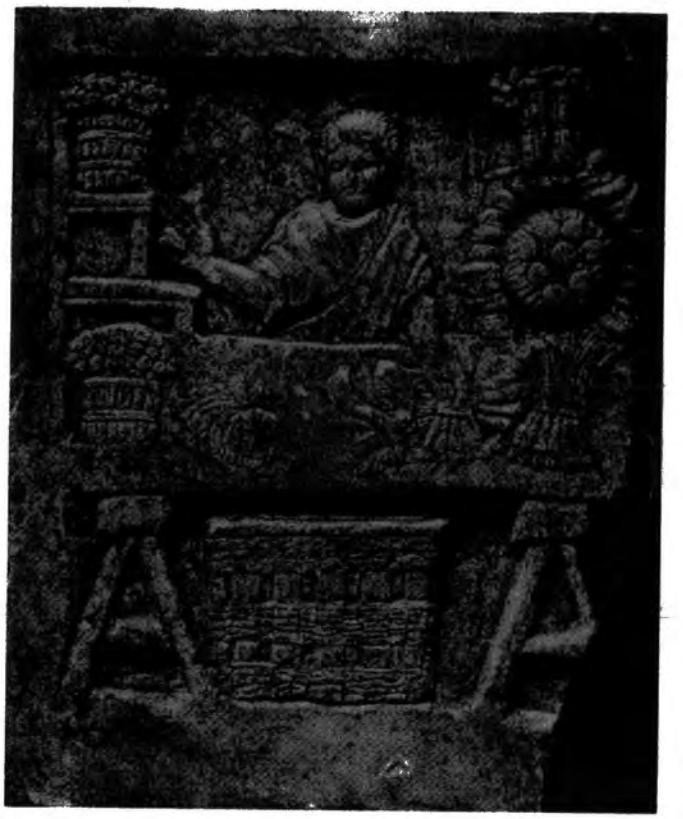
Figure 61



SILCHESTER.—PLAN OF INSULA IX.

Figure 62

a. relief of fruit or vegetable sellers, Arlon.



b. relief of vegetable seller, Ostia.

Figure 63

a. Relief of butcher, Ostia.

b. Relief of butcher, Antikensammlung, Dresden.

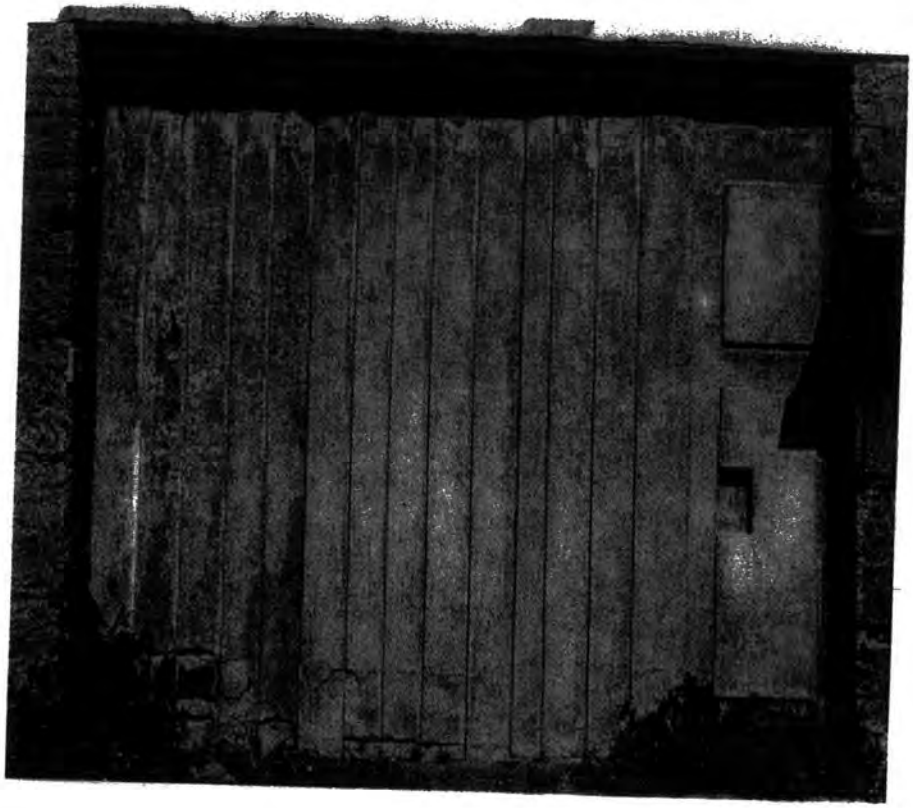
c. Relief of butcher, Rome.

Figure 64

a. Painting of the selling of bread, Pompeii.

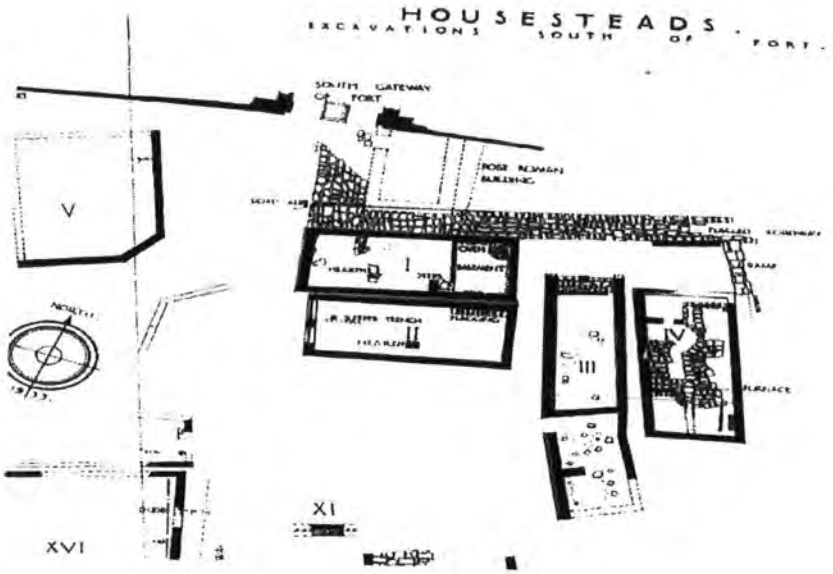
b. Relief of poultry, Ostia.

Figure 65



a. Plaster cast of a shop shutter (IX.7.10), Pompeii.

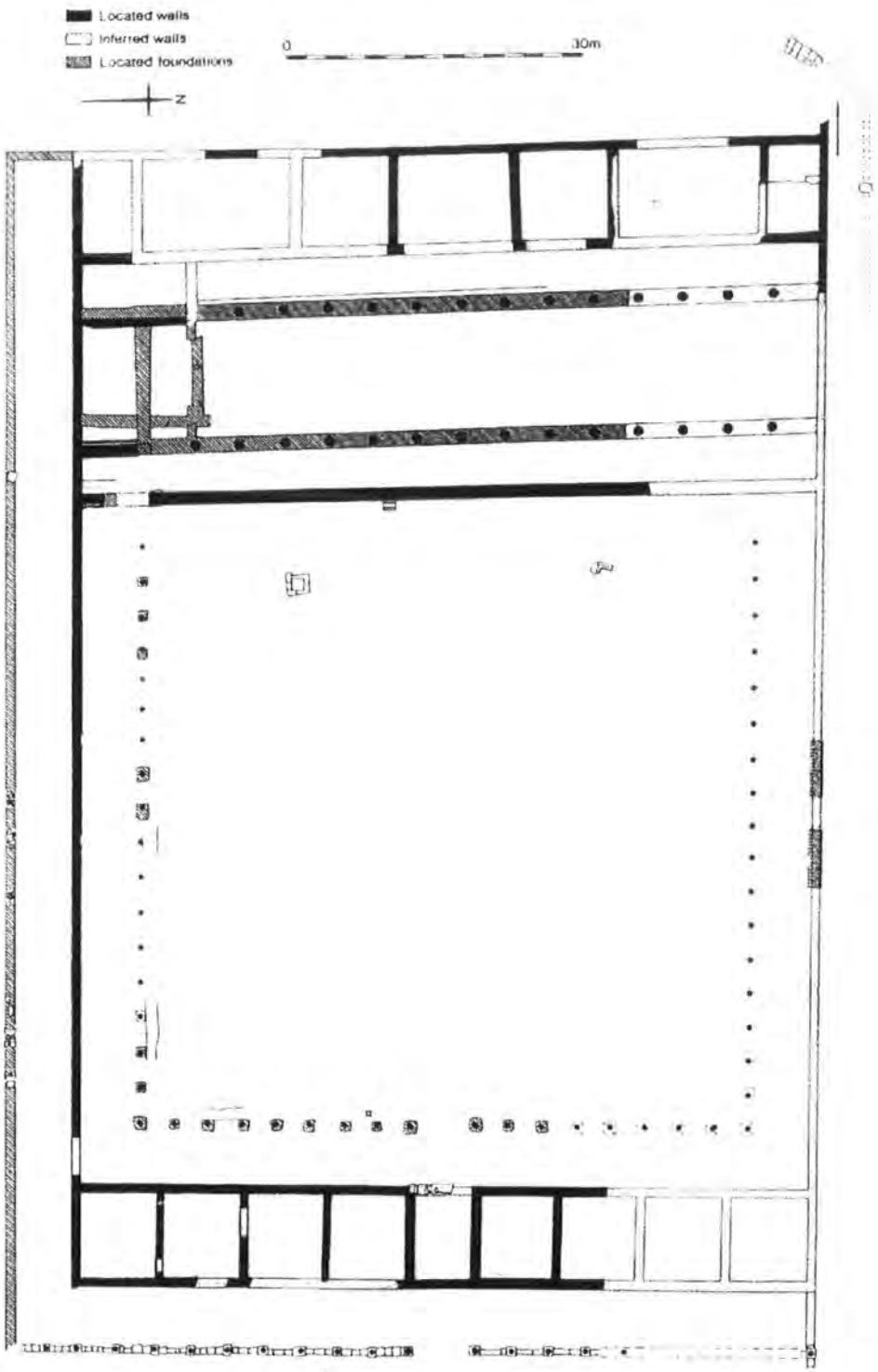
b. Groove for fixing a shop shutter (VII.12.11), Pompeii.



a. Slotted stone in Building 2, Housteads.

b. Slotted stone for a shop shutter, Catterick.

Figure 67



A restored plan of Wroxeter's Forum. The position of the gutter find is marked at F.

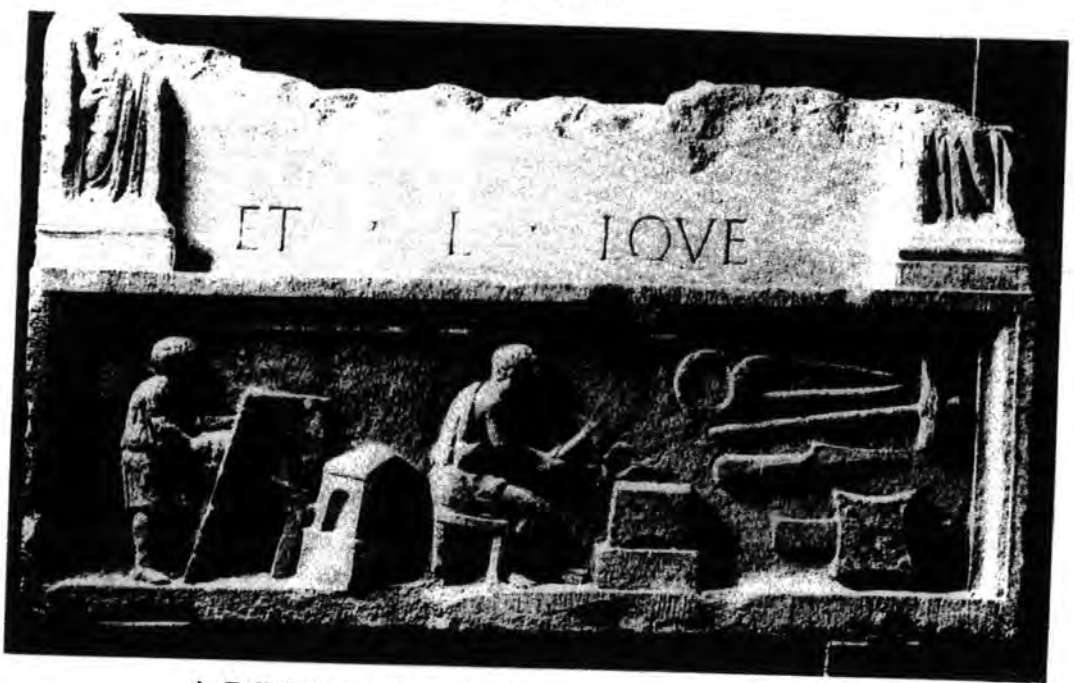
The Wroxeter Forum

A reconstruction drawing by Amédée Forestier in 1925 of the Watling Street and Forum in use. Although some of the detail can be faulted, it vividly conveys the bustle of the city in its heyday.

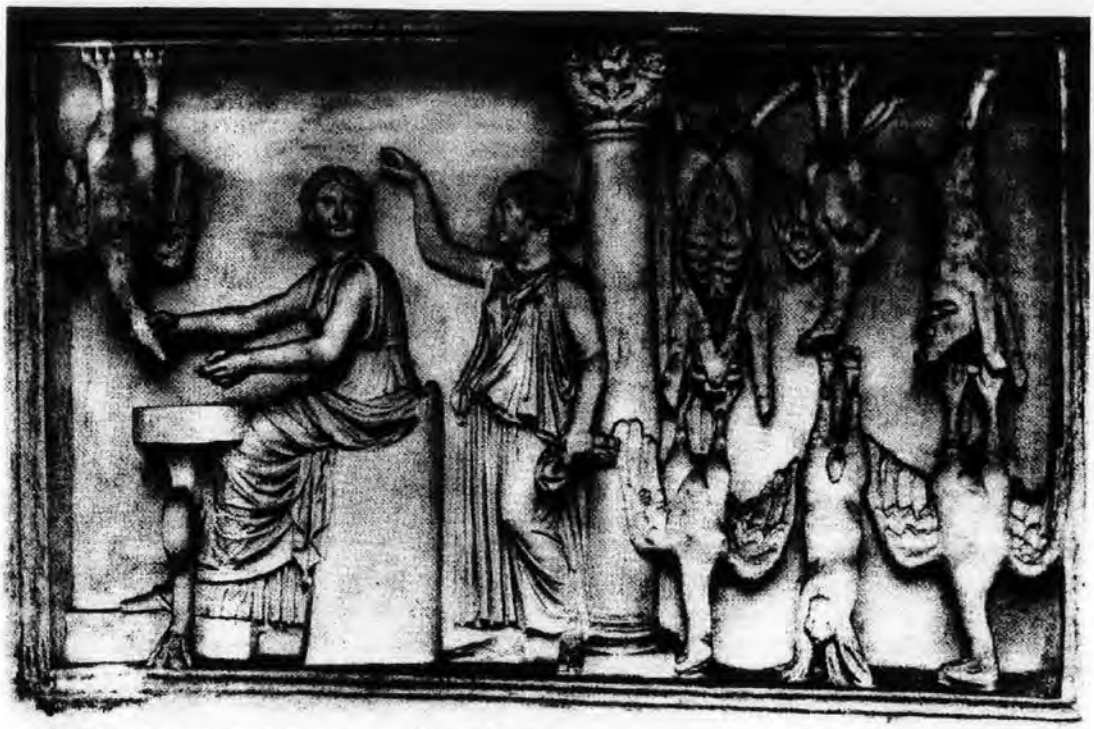
Figure 68

Figure 69

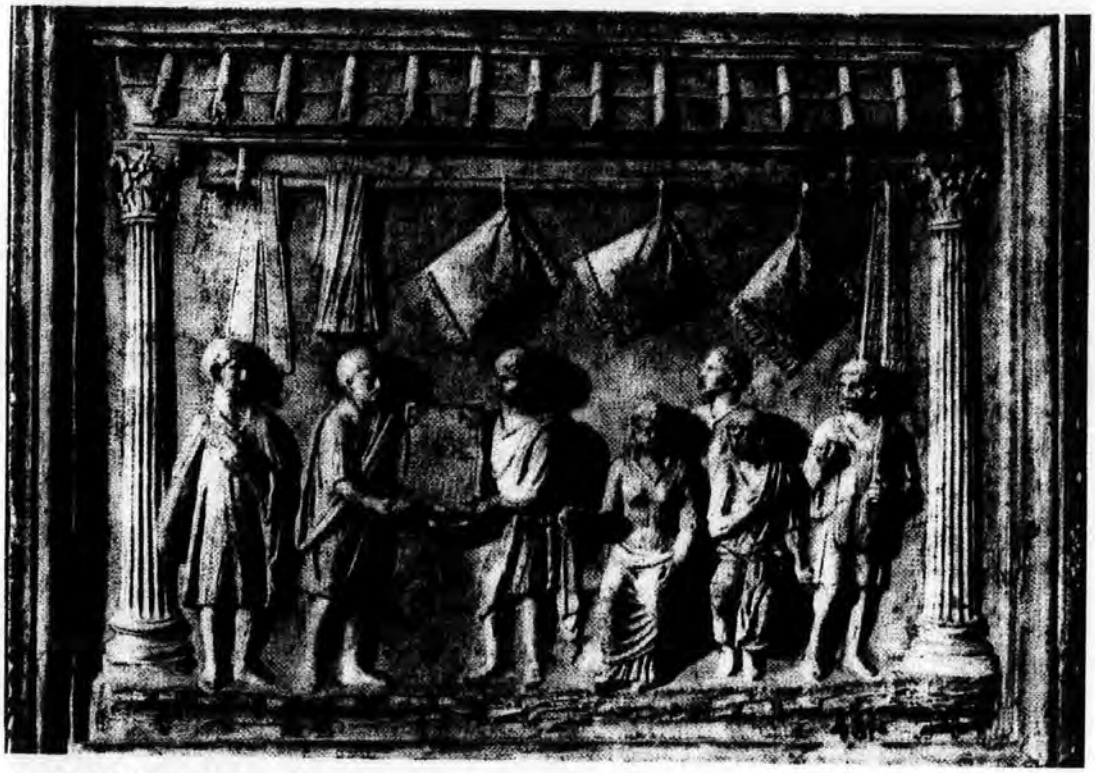
a. Alter of Atimetus, Vatican, Rome.



b. Relief of a smith, Aquileia.



a. Relief of game butchers or sellers, Rome.



b. Relief of a fabric seller, Rome.